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MEMOIRS OF THE GEOLOGICAL SURVEY

OF THE

UNITED KINGDOM.

THE

JURASSIC ROCKS

OF

BRITAIN.

VOL. II. YORKSHIRE.

TABLES OF FOSSILS.

BY

C. FOX-STRANGWAYS, F.G.S.

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INTRODUCTION.

This Catalogue of Yorkshire Jurassic Fossils was originally compiled, on a smaller scale, to facilitate the work of the Geological Survey of the north-eastern part of this county.

During this work it was of such frequent service, in estimating the range of different species, in tracing the origin of these determinations, and thus concisely pointing out what had been done by other authors in this field of inquiry, that it occurred to me it might also be of some utility to students of this district, until we get the more complete work of Mr. Etheridge, so long promised, and for which all geologists have been so anxiously looking forward. With this object it is offered as an appendix to the present monograph.

The Catalogue naturally depends very largely upon the works of Messrs, R. Tate and J. F. Blake for the Lias, and Messrs. Blake and W. H. Hudleston for the Oolites; as well as the monographs of the Palæontographical Society, all of which contain much valuable information on the Palæontology of these rocks. I have received much assistance from many friends, more particularly from Dr. G. J. Hinde, Mr. James Carter, Mr. J. F. Walker for the respective classes in which the researches of these authors are so well known. I am also much indebted to Dr. Henry Woodward, Mr. R. Etheridge, Mr. H. M. Platnauer, Mr. S. Chadwick, Mr. G. W. Lamplugh, and others for many facilities afforded; and especially to my colleagues Mr. C. Reid, for the revision of the list of Plants, and Messrs. G. Sharman and E. T. Newton for much information and general supervision of the work.

The general scheme of the Catalogue is to give in the first column the original reference to each species, with a few other references to more easily accessible works or to better figures, followed by some of the synonyms of the species, but more particularly those which have been applied to Yorkshire specimens.

The narrow columns give the range of the species, with the initial of the author who has recorded it from that horizon and locality; with the exception of the columns marked "pass up" and "pass down,"* where the initials are those of the formation to which the species pass in either direction.

The small figures under the initials indicate the region from which the record is made, thus:-

1. Refers to species found on the coast.

2. Along the northern escarpment and Cleveland.

- 3. The western escarpment (including the western end of the Howardian Hills).
- 4. The interior of the district.
- 5. The Howardian Hills.
 6. South Yorkshire.

7. Generally present in most districts.

^{*} The term "pass down" is rather objectionable, but of course it really implies that the species have been recorded from older formations.

The last column is reserved for observations; these no doubt might have been more ample, but it is hoped that the space may also be of service to students to record their own notes.

The names of the species are printed in three forms of type: those now recognized being in antique roman characters, the synonyms of these in italics; while the uncertain and doubtfully determined forms, as well as the MS. names of species which have not as yet been figured or described, are placed in SMALL CAPITALS.*

The stratigraphical arrangement adopted has necessitated the division of the lists into three separate tables. Some of the species are therefore repeated; but this arrangement enables us to keep distinct the main groups of strata.

In Table I. the Lias is divided into its several zones; additional columns are given to include the records of those observers who have only separated the formation into its three main stratigraphical divisions.

A column is added for the Rhætic Beds, but these are not now included in the Lias.

In Table II. the marine beds of the Lower Oolite are separated into the following six horizons:-

Cornbrash.

Grey Limestone, Brandsby Roadstone, + and Stonescliff Wood Series 1 (of Mr. Hudleston).

Millepore Bed and Whitwell Oolite.

Eller Beck Bed and Hydraulic Limestone.

Dogger.

Blea Wyke Beds.

In this table the columns referring to the plants have to be arranged in a different manner to suit the three great estuarine series which separate the above-named marine bands.

Table III. has eight main stratigraphical columns, § which are grouped in the following manner:--

Portlandian Beds (Zone of Bel. lateralis).

Kimeridge Clay.

Upper Calcareous Grit, and Cement-stone of the Howardian Hills.

Coral Rag.

Zone of Am. plicatilis Middle Calcareous Grit and Upper Limestone. or true Corallian.

Lower Calcareous Grit and Lower Limestone.

J or true Coramian or Upper Oxfordian or Zone of Am. perarmatus.

Oxford Clay.

Kellaways Rock. (Lower Oxfordian.)

^{*} There are a large number of the MS. names of Bean in the British and other Museums, more particularly in the fine collection formed by Mr. Leckenby, and which is now in the Woodwardian Museum at Cambridge; but with the exception of a few, of which good specimens exist, only those are inserted in this Catalogue which have previously appeared in published lists. Some of the species lately recorded by Mr. Lamplugh from the so-called Portlandian Beds of Specton are also omitted, as the Jurassic age of these beds is as yet somewhat doubtful. † Indicated by the no. 3.

Indicated by the uo. 5.

[§] An extra column (Coralline Oolite) is added to include the observations of those who have only recorded the fossils in this general manner.

In this table the figures below the initials are, as nearly as possible, the same as those in the previous tables, with the following slight modification to suit the four districts into which the Corallian Rocks have been divided, and which are indicated thus:---

- The eastern part of the Tabular range, from Scarborough to Brompton.
 The western part of the Tabular range, from Pickering to Helmsley.
 The Hambleton Hills.
 The Howardian Hills.

Abbreviations used in the columns marked "pass up," "pass down."

P. 1	Portlandian Beds.
К.	Kimeridge Clay.
U.C.G.	Upper Calcareous Grit or Cement-stone.
C.R.	Coral Rag.
C.O.	a m out attain all and and a
0.0.	Upper Limestone). Coralline Colite (Middle Calc. Grit and Some of Am. plicatilis.
C.G.	T '' A 1 A '' A 1 T 1 1 2
0.0.	stone. Zone of Am. perarmatus.
O.C.	Oxford Clay.
Kel.	Kellaways Rock.
Cb.	Cornbrash.
Ğ.L.	Grey Limestone.
M.	Millepore Bed.
El.	Eller Beck Bed.
D.	Dogger.
Bi.	Blea Wyke Beds.
U.L.	Upper Lias.
M.L.	Middle Lias,
L.L.	Lower Lias.
Ju.	Jurensis Beds.
	These are separated on account of their forming
C.	Capricornus Beds. 1 a portion of the Middle Lias of some authors
J.	Jamesoni Beds. and of the Lower Lias of others.

Abbreviations used in the several columns of Strata.

	Authors.	Works referred to in which the determinations occur.
В.	J. F. Blake	The Kimeridge Clay of England, Q. J. G. S., vol. xxxi., p. 196, 1875.
Be.	W. Bean	Catalogue of Cornbrash Fossils, Mag. N. H., ser. 2, vol. iii., p. 57, 1839.
C.	J. Carter	The Decapod Crustaceans of the Oxford Clay. Q. J. G. S., vol. xlii., p. 542, and letters to the
D.	T. Davidson	author. The Fossil Brachiopoda. Monographs of the Palæontographical Society, 1851-55 and 1874-82.
		The Yorkshire Oolites. Proc. Geol. Assoc., vols. iii., iv., v., 1874–76–78. The Gasteropeda of the Yorkshire Oolites. Geol.
Н.	W. H. Hudleston	Mag., 1880-85. The Corallian Rocks of England, by Blake and Hndleston. Q. J. G. S., vol. xxxiii., 1877. The Jurassic Gasteropoda, 1888-90. Mon. of the Pal. Soc.
Дi.	G. J. Hinde	Q. J. G. S., vol. xlvi., p. 54; and letters to the author.

	Authors.	Works referred to in which the determinations occur.
r. K.	J. W. Judd W. Keeping and C. S. Middlemiss.	The Specton Clay. Q. J. G. S., vol. xxiv., 1868 Geol. Mag., Dec. II., vol. x., 1883.
La.	G. W. Lamplugh	Subdivisions of the Specton Clay. Q. J. G. S., vol. xlv., p. 575.
Le.	J. Leckenby	Kelloway Fossils. Q. J. G. S., vol. xv., p. 4, 1859. Oolitic Plants. Q. J. G. S., vol. xx., p. 74, 1864. Supplement to the Gt. Oolite
Ly.	J. Lycett	Moll., 1863 - Mon. of the Pal. The Fossil Trigoniæ, Soc.
L.	Lycett and Morris	The Great Oolite Mollusca, 1850-53-55. Mon. of the Pal. Soc.
M. N.	J. Morris - A. G. Nathorst -	Catalogue of British Fossils, 1854. Öfversigt af K. Vetens. Akad. Forhandlingar, 1880, No. 5 and 9.
0. 0w.	A. Oppel - R. Owen	Die Juraformation, 1856-58. The Reptilia of the Liassic Formations. Mon. of the Pal. Soc., 1861-81.
P.	J. Phillips	The Geology of the Yorkshire Coast, 1829-35-74. Mon. on the Belemnitidæ, 1865-70. Geol. of Oxford and the Thames Valley, 1871.
Pl. Pv.	H. M. Platnauer - A. Pavlow and G. W	Rep. York. Phil. Soc., 1886-91. Argiles de Specton et leurs équivalents, 1892.
S.	Lamplugh. Geol. Survey	Explanations of the Geol. Survey maps of this district, 1880-88, or entered in the books of the Palæontological Department of the Survey.
Si.	M. Simpson -	The Fossils of the Yorkshire Lias, 1855 and 84.
T. W.	Tate and Blake - W. C. Williamson -	The Yorkshire Lias, 1876. Trans. Geol. Soc., Ser. 2, vol. v., p. 223, 1837,
Wr.	T. Wright -	and vol. vi., p. 143, 1841. Q. J. G. S., vol. xvi.; Cottesw. Nat. Club for 1869, p. 141; and the Mon. of the Pal. Soc., (Ool. Echinodermata) 1857-80, (Lias Ammo-
Wk.	J. F. Walker	nites) 1878–86. Proc. Yorksh. Phil. Soc., 1877 and 1889; also Davidson's Suppl. to the Mon. on the Brachio-
Wo.	A. Smith Woodward	poda, 1874-82. Geol. Mag., 1886.
		Museums.
Bm. Cm. Jm.		Cambridge. logy, 28, Jermyn Street, London.
Mm Sm. Wm.	Malton Museum. Scarborough Museum. Whitby Museum.	
Ym.	Museum of the Yorkshir	e Philosophical Society, York. occur at this horizon although there is no specia

The following species are given by Messrs. Tate and Blake in the first part of their work on the Yorkshire Lias; but as there is no notice taken of them in the second or palæontological part, we have not included them in our catalogue:—

		,				_		_		_	_				
Doubtful Species mentioned in the Yorkshire Lias. Part I.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	References to the Yorkshire Liss, Part I. Supposed Substitutions in Part II.
Rhynohonella subserrats		Ī	Î	Ī				т							pp. 102, 230 - Rh. subconcinna.
Lima galathea										1					p. 172 - Limea acuticosts.
Ostrea lageniformis -							т			1	Т				p. 88 · · Ostrea Goldfussii or
Pecten Hehlii • •							т			ļ					p. 86.
Arca Stricklandi -						т	Т								p. 88 Macrodon intermedius.
Arcomys petræs -					1					т					p. 154 Arcomya longa.
Ceromya infraliassica		T													pp. 43, 45.
Macrodon liasinus -	.		ľ							Т					p. 154 - Macrodon intermedius.
Modiola Simpsoni -	.											T			p. 180 - Inoceramus.
Nucula subglobosa	.										Т			İ	p. 172 Nucula cordsts.
Pholadomya costata	•									Т					p. 131 • Pleuromys coststa or Phola - domys Simpsoni.
Pleuromya concinna	-								Т		ļ	1			p. 116 Pleuromya mundula.
" punotata	-	1				1	T					ŀ			p. 87 Gresslya.
" rostrata	-									т				ì	pp. 126, 154 - Pleuromys coststa.
Tanoredia dubia -	-										-	T			p. 180 Tancredia dionvillensia.
Unicardium janthe	-								ľ	T	1				p. 130 Unicardium subglobosum.
Cerithium camertonensis							Т	1							p. 87.
Cerithium tenuicostatum			т		İ				ŀ		1		1	1	p. 44.
Chemnitzis etslease	-		7	r											p. 52.
" ilminstrensis	,								Т						p. 116 - Chemnitzia semitecta.
Hydrobia Krausseana	-	7	r									١			p. 45 Turbo tenuis.
Pitonillus turbinatus	-			-					T	T	1				pp. 154, 155, 172 Turbo aciculus.
Turbo bullatus •	-						ļ			T					p. 154 Turbo latilabrus.
" littorinæformis	-					Ì	1	1			Ì		l		p. 87.
Turritella crassilabrata	-			ין	r		1								p. 71.
Ammonites erratus	•											7	פ		p. 180, see also p. 311 in Part II.
_ serridens	_													T	
Pachycormus latipennis	-	1	1									7	r		p. 180 - Pachycormus latirostris.
The following dou	bt	fu	l f	or	ms	- 'a	re	al	so.	n	ot	ec	l b	y	the above-named authors :—
	Ī	Ī	Ī	١	1	1	Ī		Ī	Ī	Ī	Ī	1	1	
Onychites numismali. Quenst., Jura. p XXIV., f. 59; T. & B p. 448.	e, l. .,						1	r							Occurs at Peak.
"Orinoid arms"? T. & B p. 448, pl. XVII., f. 4 non 40.	5		9	P	P				9			?			Abundant among the Microzos.
Brown horny teeth of nooks," T. & B., p. 44 pl. XVII., 1, 41.	r 8,		9	9											Occur in the lower beds.
	_					_	1		Į	1	}	_[

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CATALOGUE

OF THE

YORKSHIRE JURASSIC FOSSILS,

COMPRISING

The GENERA and SPECIES

HITHERTO OBTAINED FROM THIS DISTRICT,

WITH

Reference to their Geological Distribution, to the Localities in which they have been found,

AND

TO THE AUTHORITIES BY WHOM THEY HAVE BEEN RECORDED.

TABLE I.

RHÆTIC AND LIAS SPECIES.

TABLE I.

RHÆTIC AND LIAS SPECIES.

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Sp.	ECIBS.	Rhætic Beds.	Am. planorbis.	Am, angulatus,	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
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oicatric Yorksh xiv., f. 9	Lias, p. 474, pl.										T ₁ J _m								Туре іс Јт.
Equisetite	s:																		
sp. (? lia	ssicus, Heer) -				T														
Mulliporit	es i																		
furcilat Yorksh ziv., f. 7	Lias, p. 474, pl.										T Jm								Type in Jm.
Pachyphy	ilnm ı																		
peregri berg, Lindley Flora, t B., p. 47	nnm, Stern- (Araucarites) & Hutton, Foss. . lxxviii.; T. & /5.												T						In Whitby Museum.
Peuce (Ce	droxylon):																		
1831. Fo	ana, Witham, ss. Veg., t. xiv., tv., f. 4, 5.																	T	Coniferæ also occur in the angulatus and serpentinus zones.
Foss. Ve t. xv., f.	ana, Witham, eg., t ix., f. 1-5;																	Т	
ANI	MALIA.																		
FORAM	INIFERA.							i											
Cornuspir infima,; Q.J.G. T. & B., f. I.	a: Strickland, 1846, S., vol. ii., p. 30; p. 451, pl. xviii.,		T	Ţ	T ₁							T ₂							
ularia) Kreide, Jones &	a: , Röm. (Plan- Norddeutsch. t. xv., f. 14; Parker, Q. J. ol. xvi., pl. xx., & B., p. 466, pl. 66.		T 6	T 1 6	T	T 6			T			T							

				I	10W	er.			Mie	idle.	ľ	Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Lower Lias. Middle Lias.	Upper Lias.	REMARKS.
Cristellaria—cont. crepidula, Fichtel and Moll, Test. Micro, pl. xix, f, g, h, i; Brady, in Moore's Mid. & Up. Lias, pl. iii, f. 39; T. & B., p. 466, pl. xix., f. 14; xvii, f. 25.		T	T	T				T	. !		T 6							
globifera, Blake, 1876, Yorksh. Lias, p. 467, pl. xix., f. 17.		T 6		T 1							T							
major, Bornemann, Lias v. Gött., pl. iv., f. 31; T. & B., p. 465, pl. xix., f. 15.		T	T i	Ţ	T 6	T 6			;									
pauperata, Jones & Parker, (Planularia) Q. J. G. S., vol. xvi, pl. xx., f. 39; Brady, in Moore's Mid. & Up. Lias, pl. ii., f. 24, 25; T. & B., p. 465, pl. xix., f. 12.		T	T															
recta, d'Orb., 1839. Mém. Soc. Géol. Fr., t. iv., pl. 1, f. 8, 9; T. & B. p. 465, pl. xix., f. 18, 13a; pl. xvii., f. 24.		T 6	T ₆	T .	T 6			T										
rotulata, Lam. Anim. sans Vert.; Parker & Jones, loc. cit., pl. xx f. 42, 43; Brady, loc. cit., f. 36, T. & B., p. 467, pl. xix., f. 18.		T 6	Ţ	T	Τſ			T 6										
 varians, Bornemann, Lias v. Gött., pl. iv., f. 32, 33; T. & B., p. 466, pl. xvii., f. 27; pl. xix., f. 16. 		T 6	Ţ	T	T 6			T			T 6							•
Breoni, Terq., Mém. snr Foram. du Lias, 1863, pl. vii., f. 16; T. & B., p. 457, pl. xviii., f. 20.		T 6	Ţ															
brevis, d'Orb., For. Foss. de Vienue, pl. ii., f. 9, 10; T. & B., p. 459, pl. xviii., f. 24.			T	T														
burgundiæ, Terquem, loc. cit., 1863, pl. ix., f. 3; T. & B., p. 461, pl. xviii.; f. 29.	,		T	Ţ	T ₆						T 6							
communis, d'Orb., Mém. Soc. Géol. Fr., 1840, pl. i., f. 4; T. & B., p. 457, pl. xviii., f. 19.		T	T 1 6	T				T	T.									
funiculosa, Terq., loc. cit., 1866, pl. xix., f. 29; T. & B., p. 461, pl. xviii. f. 28.				,	T 6			T		1								

			Lower.						Mid	dle.	Upper.								
Species.	Rhætic Beds.	Am. planorbis. Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis. Am. jurensis. Lower Lias.	Middle Lias.	Upper Lias.	Remares.				
entalina—cont. glandulosa, Terq., loc. cit., 1863, pl. v., f. 15; T. & B., p. 460, pl. xix., f. 2.		T 6	T	T															
monilis, Cornuel, Mém. Soc. Géol. Fr., 1848, f. 18; T. & B., p. 459, pl. xviii., f. 27.		Ţ		! ! !							Ţ								
nodosa, d'Orb., Mém. Soc. Géol. Fr., 1840, pl. i., f. 6, 7; T. & B., p. 459, pl. xviii., f. 26.		T	•																
nummulina, Gümbel, Foram. Fauna, Nordalp., Eocan., pl. i., f. 45; T. & B., p. 461, pl. xviii., f. 30.								T			T								
obliquestriata, Reuss, Zeits. Deutsch. Geol. Ges., 1851, pl. iii., f. 11, 12; T. & B., p. 460, pl. xix., f. 4.			Ţ	T															
oligostegia ?, Reuss Verst. Böhm. Kreide t. xiii., f. 19, 20; T. & B. p. 458, pl. xviii., f. 21.		Ţ		1							J.	3							
pauperata, d'Orb., Foram. Foss. de Vienne pl. i., f. 57, 58; T. & B., p. 458, pl. xviii., f. 23.		Į,	T	4							7								
planata, Blake, Yorksh Lias, p. 458, pl. xviii. f. 22.	,	7	1	-						:	1	r 6							
 rapa, d'Orb., Ann. Sci Nat. 1826, p. 253; T. 8 B., p. 460, pl. xix., f. 3. 	į		1			١													
tecta, Terq., Foram. du Lias, pl. ii., f. 21, 1858 T. & B., p. 459, pl. xviii. f. 25.	;	3	[]	,															
Flabellina:				1							١	1	1				1		
rugosa, d'Orb., Mém Soc. Géol. Fr., 1839, pl ii., f. 4-7; T. & B., p. 467 pl. xix., f. 19.	,		r s	1	r														
Prondicularia: complanata, Defr. Dict. Sci. Nat., 1825, vol. 35; T. & B., p. 468, pl. xix., f. 20.		[r 7	c		·													
intumescens, Borne mann, Lias v. Gött., pl iii., f. 19; T. & B., p. 468 pl. xix., f. 21.	1.1,		1	: : ا	r							ļ							

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		Lower.							Middle.		_	Upper.						
Species.	Rhætic Beds.	n. Perolis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus,	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Frondicularia—cont. lignaria?, Terq., Mém. sur Foram. du Lias, 1866, pl. xix., f. 14; T. & B., p. 468, pl. xvii., f. 28. nodosaria, Terq., Foram. du Lias, 1866,		Ti	T					T										
pl. xxii., f. 25-30; T. & B., p. 469, pl. xix., f. 24; pl. xvii., f. 44.			T	m									-1					
 sulcata, Bornemann, Lias v. Gött., pl. iii., f. 22; T. & B., p. 469, pl. xix., f. 23. Terquemi, d'Orb., in 		T	i	T				T.										
Terquem, loc. cit., 1858, pl. i., f. 12; T. & B., p. 468, pl. xix., f. 22.				1				ĩ										
Glandulina: cunciformis, Terq., loc. cit., 1866, pl. xix., f. 7; T. & B., p. 454, pl. xviii., f. 12.			Ţ															
humilis, Römer, Verst, Nordd. Kreide, pl. xv., f. 6; T. & B., p. 454, pl. xviii., f. 11.								T										
paucicosta, Röm., loc. cit., pl. xv., f. 7; T. & B., p. 455, pl. xviii., f. 18; pl. xix., f. 1.		T 6		T.														
Involutina: liassica, Jones, Proc. Cottesw. Club, 1853, vol. i.; T. & B., p. 463, pl. zviii., f. 6.			Ŧ	Ţ									; ;					
Lagena:		m	m	m														
elongata, Ehrenberg, Mikrogéologie, pl.xxv.a; T. & B., p. 454, pl. xviii., f. 9.		T	T	T														
12e vis, Montf., Conch. Syst., 1808; T. & B., p. 453, pl. xviii., f. 7.	•	T		T														
natrii, Blake, Yorksh. Lias, p. 453, pl. xviii., i. 8.		T 6																
ovata, Terq., Mém. sur les Foram. du Lias, 1888, p. 1, f. 2; pl. v., f. 3; T. & B., p. 454, pl. xviii., f. 10.		T 6		i					,									

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Species.	Rhætic Beds.	Am. planorbis.	Am. sngulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARES.
Lingulina: striata, Blake, Yorksh. Lias, p. 456, pl. xviii., f. 16. tenera, Bornemann, Lias v. Gött., t. iii., f. 24; T. & B., p. 455, pl. xviii., f. 16.		To	Ţ	T	T			T			T 6.							
Lituola: agglutinans, d'Orb., Foram. Foss. de Vienne, pl. vii., f. 9; T. & B., p. 452, pl. xvii., f. 40. globata, Blake, Yorksh. Liss, p. 452, pl. xviii., f. 5.		T			-						T		T					
### depressa, Blake, Yorksh. Lias, p. 463, pl. xix, f. 9. ineequistriata, Terq., Foram. du Liss, 1863, pl. viii., f. 15; T. & B., p. 462, pl. xix, f. 7. ? Paulinie, f. 15; T. & B., p. 463, pl. xvii., f. 5; T. & B., p. 463, pl. xvii., f. 12; T. & B., p. 463, pl. xvii., f. 12; T. & B., p. 463, pl. xvii., f. 12; T. & B., p. 452, pl. xix., f. 6. raphanus, Linn., Syst. Nat., ed. 10, 1768; T. & B., p. 462, pl. xix., f. 5. reversa, Blake, Yorksh. Lias, p. 461, pl. xviii., f. 51. ### Comeri, Reuss, Böhm. Kreide, pl. viii., f. 10; T. & B., p. 463, pl. xix., f. 8. unicostata, Terq., Foram. du Lias, 1858, pl. ii., f. 19; T. & B., p. 463, pl. xviii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii., f. 19; T. & B., p. 463, pl. viii.		To To To	Ti .	T	Te	To		Ti			T T							·
pl. xvii., f. 21. Miliola: Scheibersii, d'Orb., Foram. Foss. de Vienne, t. xix., f. 22-24; T. & B., p. 451, pl. xviii., f. 2.		T 8																

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Rbætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
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Species.	Rhætic Beds.	Am, planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks
olymorphina—cont. nodosaria, Reuss Sitz. K. Akad, Wiss				T														
Wien., 1863, pl. vii., f. 85 T. & B., p. 471, pl. xvii. f. 34. problema, d'Orb., Ann Sci. Nat., 1826, vol. vii p. 266; T. & B., p. 470		Ŧ]]							
p. 266; T. & B., p. 470 pl. xvii., f. 33. simplex, Terq., Mém sur Foram. du Lias 1863, pl. xi., f. 1-4; T. &	;	T			! !												Ì	
B., p. 471. ulvinulina: elegans, d'Orb. (<i>Rosalia</i>), Ann. Sci. Nat. 1826, vol. vü., f. 276; T & B., p. 472, pl. rvii. f. 38.		T	Ti	T							T 3							,
extularía: agglutinans, d'Orb. Foram. de Cuba, pl. i. f. 17; T. & B., p. 472, pl xvii., f. 37.			!	Ţ						,	T 2 6							
rochammina: incerta, d'Orb., Foram de Cuba, pl. vi., f. 16, 17 T. & B., p. 452, pl. xvii f. 17.											Ţ		T					
inflata, Montf., Concb Syst., 1808; T. & B., p 452, pl. xvii., f. 18.													T					
irregularis, d'Orb (Webbina) Prod. II. p. 111; T. & B., p. 452 pl. xviii., f. 3, 4.		T																
aginulina: anomala, Blake Yorksh. Lias, p. 464 pl. xvii., f. 23.								T										
legumen, Linn., Syst								T								[

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Species.	Rhætic Beds.	Am. planorhis.	Am. angulatus.	Am. Bucklandi.	Am. exynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
CŒLENTERATA. (ACTINOZOA.) Montlivaltia: Guettardi, Blainville, Dict. Sci. Nat., 1830, p. 302, t. 60; Chap. & Dew., Foss. de Lux., pl. 38, f. 6; Duncan, Pal. Soc., 1878, pl. xii., f. 10-14; T. & B., p. 447.				T I Jm														Abundant.
Haimei, Chap. & Dew., Foss. de Lux., pl. 38, f. 5; Duncan, Pal. 80c., 1867, pl. x., f. 24–32; T. & B., p. 447.			T 6 Jm	Ţ											S			Abundant at Redcar.
polymorpha, Terquem & Piette, Lias Inf. de l'Est de la Fr. pl. xvi., f. 17-21; Duncan, Pal. Sec., 1867, pl. vii., f. 14, 15; pl. viii., f. 1-4; T. & B., p. 447. Septastræa: Heteras-			Jm												1			C. Hirton O. I. C. C.
træa, Tomes. excavata, Fromentel, Martin, Infralias de la Côte-d'Or., pl. viii., f. 1- 5; Duncan, Pal. Soc., 1867, pl. l., f. 6, 7; T. & B., p. 447.			T 6 Jm															See Hinde, Q. J. G. S. vol. xliv., 1888, p. 200 Heterastræa, Tomes Geol. Mag., 1888, p. 207 Rare.
ECHINODERMATA. (ECHINOIDEA.) Cidaris: amaithei, Quenst., Petref., p. 574, t. 48, f. 28-30; Jura, t. 24, f. 42-										T								
44; Wright, Ool. Echin., 1855, p. 59; T. & B., p. 440.		T	T				Ti	Ţ	Ţ							Sm		
Ool. Echin., p. 26, pl. i., f. 1; Phil., G. Y., pl. xii. f. 1?; T. & B., p. 439; Echinus antiquus, E. obsoletus, Simp., p. 241. Echinus: antiquus, Simp., v. Cidaris Edobsoletus, Simp.) v. wardsi.			3															
Hemipedina: Tomesii, Wright, Ool. Echin., 1860, p. 457 (woodcut); T. & B., p. 440.		T 2 6	T ₃															
s p., T. & B., p. 440. Pseudodiadema: Slateri, Blake, Yerksh.							T T											Spines. Resembles Hemipedin
Lias, p. 440. Rhabdocidaris: sp., T. & B., p. 440.							1			T								Jardinii, Wright. Spine.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	A was and a second to this	Am margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(ASTEROIDEA AND OPHIUROIDEA.) Aspidura: loricata, Morris, v. Ophioderma Milleria									0.00										•
Asteria: media, Simp., v. Uraster carinatus. Asterias: spherulata, Y. & B., v. O.																			
Milleri aud O. carinsta. **Astropecton:** **Bastingiæ*, Forbes Survey vol. ii., pt. 2, p. 478 lhid., Dec. 1, pl. ii., f. 1: Wright, Ool. Echin. 1863, p. 113, pl. vi., f. 3 4; T. & B., p. 441.	,								Ť								T		Type in Jm. Wright (pl. vi., f. 4) in Leck. Coll. Cm.
Luidia : Murchisoni, Will. v. Sola . ter.	g-		4																
Ophioderma: carinata, Wright, Ool Echin., 1866, p. 148, p) xvi., f. 1; T. & B., p. 442 ? Ophiura gracilii Simp., p. 240.	;								T 1									P	Type in Leck Coll. Simpson's type in Sm. Wright refers A. spherulata, Y. & B. to this species, loc. cit., p. 149.
G avey1, Wright, Map Nat. Hist., 1884, vol. xiii pl. xiii., f. 1; Ool. Echin p. 147, pl. xv., f. 1-3 pl. xvii., f. 1; T. & B. p. 442.	.,							r	T										2, p2
Mileri, Phil., (Ophiure G. Y., pl. xiii., f. 20 Simp., p. 240; Wright Ool. Echin., p. 140 pl. xvi, f. 2-4; T. & B p. 441; Asterias co spherulata, Y. & B 1828, p. 210, pl. v., f. 5; Ophiura loricata, Will Mag. Nat. Hist., 1836	; , , , , , ,								T I Jm	Ţ							J	P m m	Wrights (pl. vi., f. 2-4) in Ym. Vids Forhes, Proo Geol. Soc., vol. iv.
p. 427; Aspidura, Morris Cat. Ophiolepis: Murravii, Forbe (Ophiura) Proc. Geo Soc., vol. iv., p. 238 Charlesworth, Londor Geol. Journ.; pl. xx., f. 4 5; Wright, Ool. Echin 1866, p. 151, pl. xiv f. 1, 2; pl. xvii., f. 2, 3, 4 1880, pl. xix., f. 2; T. & E p. 442.	sl.;								T										p. 232.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias,	Remarks.
(ASTEROIDEA AND OPHIUROIDEA)—cont. Ophiura: gracilis, Simp., v. Ophioderma carinsta. loricata, Will., v. Ophioderma Milleri. Milleri, Phil., v. Ophioderma. Murravii, Forbes, v. Ophioderma. Columba?, Blake, Yorksh. Lias, p. 442, pl. xvi., f. 11. Plumaster: ophiuroides, Wright, Ool. Echin., 1863, p. 112, pl. v., f. 1; T. & B., p. 441. Solaster: Murchisoni, Williamson (Luidia), Mag. Nat. Hist., 1836, vol. ix. p. 425; Forbes, Men. Geol. Survey, II., pt. 2, p. 480; Wright, Ool. Echin., p. 111, pl. v. f. 2; T. & B., p. 441; (Solaster) Blake, Geol. Mag., 1887, p. 529, pl. xv.; S. polynemia, Simp., v. S. Murchisooi.								T;?								Pi		Resembles O. Griesbachti, Wr. l.c., pl. xviii. Type in Leck. Coll. Cm.
Tropidaster: pectinatus, Forbes, Mem. Geol. Survey, Deo. iii., pl. 3; Wright, Ool. Echin., p. 102, pl. iii., f. 1, 2, 3; T. & B., p. 441. Uraster: carinatus, Wright, Ool. Echin., p. 101, pl. ii., f. 1; T. & B., p. 440; Asteria media, Simp., p. 240.								T 1								P		Very similar to <i>Uraster</i> <i>Gaveyi</i> , Forbes. Type in Leck, Coll. Cm.
(HOLOTHUROIDEA.) 'Spines or hooklets''? Blake, Yorksh, Lias, p. 443, pl. xvii., f. 42, 43		r !	r 1	r														Occurring among the Entomostracs and Forsminifera,

				L	owe	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(CRINOIDEA.) Extracrinus: britannicus, Schloth., (Pentacrinus) Petref., p. \$28; T. & B., p. 445; P. briareus, Miller, Nat. Hist. of Crinoids, p. 56; Simp., p. 241. dichotomus, M'Coy (Pentacrinus), Mag. Nat. Hist., 1848, p. 406; T. & B., p. 446. subangularis, Miller, Nat. Hist. of Crinoids, p. 59; T. & B., 446.				Pi					T?		T2	T				S? 1 2	Pi	Type in Leck, Coll,
Pentacrinus: basaltiformis, Miller, Nat. Hist. of Crinoids, p. 62; ? Simp., p. 241; T. & B., p. 444. basaltiformis, Simp., v. P. Milleri. briareus, Miller, v. Extracrinus britannicus. britannicus, Schlot., v. Extracrinus. caput-Medusæ, Simp., v. P. tuberculatus. dichotomus, M'Coy. v. Extracrinus. graciis, Charlesworth, London Geol. Journ., 1847, pl. ix; Simp., p. 241; T. & B., p. 445; P. Johnsonii, Austin, Crin., pl. xv., f. 1. interbrachiatus, Blake, Yorksh. Lias, p. 445, pl. iii., f. 5, 8. Johnsonii, Austin, v. P. gracilis. Milleri? Austin, v. P. gracilis. Milleri? Austin, v. P. gracilis. Milleri? Quenst., Jura, t. 13, f. 49-57. psilonoti, Quenst., Jura, t. 5, f. 7; T. & B. p. 444; P. scalaris. Quenst., Jura, t. 5, f. 7; T. & B. p. 443; Punctiferus. Quenst., v. P. scalaris.			Ti	1 1	1											Jus	a Pi	Type in Ym. Type in Jm.

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		_		L	owe	r.		_	Mid	ldle.	_	Upp	er.	_				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(Chrysten)																		
(CRINOIDEA)—cont. Pentacrinus—cont.																		
scalaris, Goldf., t. 52, f. 3a, b, (non c-h, non t. 60, f. 10); T. & B., p. 444, pl. iii., f. 6; f. P. punctiferus, Quenst., Handb. der Petref., t. 52, f. 41-47.						T												
scalaris, Quenst., v. P. Milleri.																		
tuberculatus, Miller, Nat. Hist. of Crin., p. 64; T. & B., p. 443; ? P. caput-Medusæ, Simp., p. 240.				T ₁ P Jm	1												٠	
ANNELIDA.									1									
Ditrupa:																		
capitata, Phil.: (Ser- pula) G. Y., pl. xiv., f. 16; T. & B., p. 437, pl. xi., f. 8.			Jm	T 1			T 2 Jm 2			T								T. & B. (pl. xi., f. 8) in Jm.
circinata, Tate, Q. J. G. S., vol. xxix., p. 350; T. & B., p. 438, pl. xiv., f. 11.					Ţ		Ţ	T 1 Jm	T	T								Type in Jm.
cylindraces, Terquem & Piette, (Serpula) Lias Inf., t. xiv., f. 10; T. & B., p. 437.				T Jm														
globiceps, Quenst., (Serpula) Jura., t. 13, f. 21; T. & B., p. 488, pl. xii., f. 2.			T Jm												Jm			T. & B. (pl. xii., f. 2) in Jm.
quinquesulcata, Münster, (Serpula) Goldf., Petref., t. 67, f. 8; T. & B. p. 438; S. pentagona, Terquem & Piette, Lias Inf., p. 118, t. xiv., f. 13, 14; S. subpentagona, Tate, Q. J. G. S., vol. xxvi., p. 402 (non Goldf.).				T	T	Jm	T 2 Jm 1	Ţ	T I Jm	T								
Galeolaria:															ĺ			
filiformis, Terq. & Piette. v. G. socialis.																		
socialis, Goldf., (Serpula) Petref., vol. i., t. 69, f. 12; T. & B., p. 436; G. fliformis, Terquem & Piette, Lias. Inf., p. 116, t. xiv. f. 6, 7.			T 1 6	T											Jm			

				L	owe	r.			Mid	dle.		Up	per.						
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.		Remarks.
Serpula: capitata, Phil. v. Ditrupa.																			
cylindrica, Terq. & Piette, v. Ditrupa.																			
deplexa, Bean; Phil., G.Y., pl. xi., f. 26; T.&B., p. 486; S. flacida Goldf., Petref., vol. 1, p. 234, t. 69, f. 7.			T Jm	Ţ			T												
flacida, Goldf., v. S. de- plexa.																			
globiceps, Quenst., v. Ditrupa.							}												
limax, Goldf., Petref., vol. 1, p. 227, t. 67, f. 12; T. & B., p. 436,			T	T Jm					T	T									
lituiformis, Münster, Goldf., p. 228, t. 67, f. 15, T. & B., p. 436.				T 1 Jm															
pentagona, Terq. & Piette, v. Ditrupa quinquesul cata.																			
plicatilis, Goldf., t. 68, f. 2; T. & B., p. 436.			T ₆			-	T												
quinquesulcata, Münster, v. Ditrupa,		١																	
socialis, Goldf., v. Galeo- laria.				!															
subpentagona, Tate, v. Ditrupa quinquesulcata.]															
CRUSTACEA.										ļ								-	
Astacus: Banksii, Simp.,v.Glyphæa Terquemi,																			
lævigatus, Simp.,v. Eryma lævis.										,									
rostratus, Simp., v. Pseudoglyphæa Etalloni.																			
Williamsoni, Simp., v. Pseudoglyphæa Etal- loni.																			
Bairdia:											_						1		
dispersa, Blake, Yorksh. Lias, p. 480, pl. xvii., f. 2.				T							Ţ						1		
ellipsoidea, Jones, v. B., liassica.																			

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus,	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lins.	Upper Lias.	Remarks.
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Bairdia—cont. elongata, Blake, Yorksh. Lias, p. 431, pl. xvii., f. 5.			T	T ₁														
lacryma, Blake, Yorksh. Lias, p. 481, pl. xvii., f. 3.			T	T														
Ilassica, Brodie, Fossil Insects, p. 80; T. & B., p. 430, pl. xvii., f. 1; (Cythere) Terquem, Mém. Soc. Géol. Fr. Ser. 2, t. v., 1855, pl. xxvi., f. 12; Baidia ellip- soidea, Jones, Q. J. G. S., vol. xxviii., p. 146.		T 6	T 1 6	1				T			T 2					:		
redcarensis, Blake, Yorksh. Lias, p. 431, pl. xvii., f. 4.			T	T														
Cythere: arcæformis, Blake, Yorksh. Lias, p. 433, pl. xvii., f. 12.			Ţ	T														
Blakei, Jones, Q. J. G. S., vol. xxviii., p. 146; T. & B., p. 431, pl. xvii., f. 6.		T	Ţ															
liassica, Terquem, v. B.																		
Moorei, Jones, Q.J.G.S., vol. xxviii., p. 146; T. & B., p. 482, pl. xvii., f. 9.		T																
redcarensis, Blake, Yorksh. Lias, p. 433, pl. xvii., f. 11.			T															
terquemiana, Jones, Q. J. G. S., vol. xxviii., p. 147; T. & B., p. 482, pl. xvii., f. 7.		T																
translucens, Blake, Yorksh. Lias, p. 432, pl. xvii., f. 10.				T	T													
triangulata, Blake, Yorksh. Lias, p. 432, pl. xvii., f. 8.		İ		T		1												
Cytherella: circumscripta, Blake, Yorksh. Lias, p. 434, pl. xvii., f. 14.			T															
crepidula, Blake, Yorksh. Lias, p. 434, pl. xvii., f. 15.								Ţ										
? paupercula, Blake, Yorksh. Lias, p. 433, pl. xvii., f. 13.			T	T														

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Species.	Rhætic Beds.	Am. planorbis.	Am. argulatus.	Am. Bucklandi,	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus,	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Eryma: lævis, Blake, Yorksh. Lias, p. 429, pl. xvi., f. 3; Astacus lævigatus, Simp., p. 239.					T				:						Sm	:		
Eryon: Hartmanni, Meyer, Nova Acta. Acad. Car. 1836, bd. xviii., t. xi. and xii., f. 2, 4; T. & B., p. 427, pl. xvi., f. 7.													T 1					
Glyphæa: liassina, Morris, v. G. Ter- quemi,																		
lyrica, Blake, Yorksh. Lias, p. 428, pl. xvi., f. 1.					T													
Terquemi, Oppel. Pal. Mitth., t. xv., f. 6; T. & B., p. 428, pl. xvi., f. 2; ? G. liassina, Morris, Cat. (non Meyer).						T									Sm			? = Astacus Banksii, Simp. See T. & B., p. 429.
Pollicipes: alatus? Tate, Irish Li- assic Foss., p. 23, f. 6; T. & B., p. 435.			,			Ţ					•							
Polycope:																		
cerasia, Blake, Yorksh. Lias, p. 484, pl. xvii., f. 16.		,	T	T														
Pseudoglyphæa: Etalloni, Oppel, Pal. Mitth., t. xiii., f. 3; T. & B., p. 427, pl. xvi., f. 4; Astaous rostratus, Williamsoni, Simp., p. 239 (non Phillips).					T? Ym										Sm			Many specimens in Museums. Horizon doubtful. Specimen in the Leck. Coll. labelled Gly- phwa Banksii, Bean, MS. (Carter),
hamifera, Blake, Yorksh. Lias, p. 428.							T											Mario (our out):
INSECTA.																		
Buprestites: brachtoides, Blake, Yorksh. Lias, p. 426, pl. xvi., f. 5.											T							Elytron.
Chanliodites: minor, Blake, Yorksh. Lias, p. 426, pl. xvi., f. 6.		T												k				Wings.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annalatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Liss.	Upper Lias.	REMARKS.
BRACHIOPODA., Delthyris, v. Spiriferina.																		
Holdeni, Tate, Q. J. G. S., vol. xxiii., p. 314; T. & B., p. 415; Dav., Ool. Brach., Sup. 1876, p. 85, pl. x., f. 12, 12a; pl. xi., f. 32; Discina sp. Terquem & Piette, Lias Inf. de l'Est de la Fr., p. 113, t. xiv., f. 33, 34; Orbicula angulata, Quenst., Brach., t. 60, f. 118.				T														
orbicularis, Moore, v. D. reflexa.																		
reflexa, Sow., (Orbicula) M. C., t. 506, f. 1; T. & B., p. 414, pl. xv., f. 5, 6; Dav., Ool. Brach., p. 10, pl. x., f. 8; Sup., p. 82, pl. x., f. 1-6; Patella lævis, Sow., M. C., t. 189, f. 4 (non 3); Y. & B., 1828, p. 249, pl. xi., f. 10; Discina orbicularis, Moore, Geologist, 1861, p. 99, pl. ii., f. 16-18.													T 1 2 3	T			P	
Lingula:					•													
longo-viciensis, Terquem, Bull. Soc. Géol. Fr., 1850, vol. viii., p. 12; Chap. & Dew., Pal. de Lux., p. 284, pl. 35, f. 5; Oppel. Jura, p. 266; T. & B., p. 413, pl. xv., f. 1-4; Dav., Sup., p. 75, pl. ix., f. 24-26; Lingula venusta, Simp., p. 226.										,			T 2 3 4 Jm 2					
Sacculus, Chap. & Dew., Pal. de Lux., p. 233, pl. 35, f. 4; T. & B., p. 414; Plav., Ool. Mon. (pars), pl. i., f. l, a, b, c, d; Sup. p. 79, pl. ix., f. 15-20; pl. x., f. 25; L. Voltzz, Desl., Bull. Soc. Linn. Norm., vol. vii., t. 4, f. 7-8; Dum., Dep. Jur., vol. iii., t. 24, f. 1, 2.					,	T 3				T 1 2								
venusta, Simp. v. L. longo- vicionsis.																		
Voltzi, Desl. v. L. saccu-		,								í								
Orbicula:																		
angulata, Queust., v. Discina Holdeni.																		li .
reflexa, Sow., v. Discina																		

				L	owe	r.			Mid	dle.		Upp	er.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Patella: lævis, Sow., v. Discina reflexa.																		
Rhynchonella: acuta, Sow., (Terebratula) M. C., t. 151, f. 1, 2; Phift, G. Y., pl. xiii, f. 25; (Rhynchonella) Dav., Ool. Brach., p. 76, pl. xiv., f. 8, 9; Sup., p. 203; T. & B., p. 420.									T					*		P 2 4		Rockcliff (Hunton).
Bouchardii î, Dav., Ool. Brach., p. 82, pl. xv., f. 3-5; Sup., p. 205, pl. xxix., f. 19; T. & B., p. 424, pl. xv., f. 17.											T 1 2 Jn 2							
capitulata, Tate, Yorksh. Lias, p. 424, pl. xv., f. 24; Dav., Sup., p. 222, pl. xxvii., f. 11, 12.						:				T								Type in Jm.
calcicosta, Quenst., (Terebratula) Handb., Petret., p. 451, t. 36, f. 6-9; Jura, t. 17, f. 16, 17; T. & B., p. 423, pl. xv., f. 15; Dav, Sup. p. 220, pl. xxviii., f. 24-38; Rh. plicatissima, T. & B., p. 423, pl. xv., f. 14-19 T. mundula, Simp. p. 230.			T 6	T	T	T	T 1 2	T Jn	T 1 4 Jm	T 1 2								T. & B. (pl. xv., f. 14-19) in Jm.
fodinalis, Tate, Yorksh Lias, p. 424, pl. xv., f. 16 Dav., Sup., p. 206, pl xxviii., f. 39-41.	;									Jm								Type in Jm. ? = R subconcinna, Dav. and ? = T. compressd Y. & B. (non Sow.).
furcillata, Theodori Von Buch, Ueber Tere- brat., Mém. Soc. Géol. Fr., 1838, vol. iii., p. 143 pl. xiv., f. 13; Röm. Verst. Ool., p. 39, pl. xiii., f. 2; Dav., Ool. Brach., p. 69, pl. xiv., f. 2-5; Sup., p. 189, p. xvii., f. 1-3; T. & B p. 420.	-					T 5	T											b.
jurensis?, Quenst. Jura, t. 41, f. 33-35 T. & B., p. 425; Dav. Sup., p. 224, pl. xxvii. f. 24-27.	: 1													T				
lineata, Y. & B. (Tere bratula), p. 232, pl. viii. f. 10; T. & B., p. 421 pl. xv., f. 21-23; Dav. Sup., p. 209, pl. xxix. f. 17, 18; T. triplicata (tridendata, p. 243) bidens, Phil, G. Y., pl xiii., f. 22, 24: R. varia bilis, Dav., Ool. Brach. p. 78, pl. xvi., f. 1-5 (only); T. triplicata Simp. p. 293				ł						T 1 2 Jm 1						P 1 2		Phillips says T. tri plicata and T. biden = Rh. variabilis, G Y., 1875, p. 243. They are considered by Walker as varieties.

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Species.	Rhætic Beds.	Am. planorbis.	Am, angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. magaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias,	Remarks.
Rhypchonella -cont.																		
oxynoti, Qnenit., Handb. Petref., t. 36, f. 4, 5; Jura, t. xiii., f. 22, 23; Tate, Geol. Mag., 1869, p. 553; Dav., Sup., pl. xxviii., f. 87, 38; Rh. variabilis, T. & B., p. 422.						T 1 6	T 1 2 Jm	Ţ		Jm					S		-	
plicatissima, Quenst., v. Rh. calcicosta.	•																	
rimosa, v. Buch (<i>Terebratula</i>) Petref. Remarq., pl. vii., f. 5; Dav., Ool. Brach., p. 70, pl. xiv., f. 6, 6a; Sup., p. 189, pl. xxvii., f. 10; T. & B., p. 420.							T											
subconcinna, Dav., Ool. Brach., p. 90, pl. xvii., f. 17; Sup., p. 206; T. & B., p. 420, pl. xv., f. 18.							Jm T	T?		T?								T. & B. (pl. xv., f. 18)
tetrahedra, Sow., (Terebratula tetraédra) M. C., t. 83, f. 4; Y. & B., 1828, pl. viii., f. 15; (Rhynchonella) Dav., Ool. Brach., p. 93, pl. xvii., f. 13, 14; Sup., p. 198, pl. xxix., f. 6; T. & B., p. 420, pl. xvi, f. 20; T. tetrahedra, compressa, Simp., pp. 228, 232.						T	Ti	82 1	T 1 8 4	T 2 6 Jm 1 K 6						Jm 1 P	P	
variabilis, Tate, v. Rh. oxynoti.																		R. variabilis, Schloth, seems to be restricted to the South of Eng- land.
variabilis, Dav. var., v. Rh. lineata.																		1001006
Spirifer:																		
liasicus, Simp., Spirifer Walcotti recentior, Simp., var. lata.																		
Spiriferina :		İ																•
oxyptera, Buvig., Mém. Soc. Philom. Verdun., vol. ii., p. 14, pl. vii., f. 8; and Géol. des Ardennes, p. 534, pl. v., f. 5; Dav., Mag. Nat. Hist., 1852, p. 16, pl. xv., f. 5-7; Geologist., 1862, p. 444, pl. xxiv., f. 4, 4a; Pal. Soc. Sup., p. 99, pl. x., f. 31, 32; T. & B., p. 447, pl. xv., 1.8.							J ₁											T. & B. (pl. xv., f. 8) in Jm.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarke.
Speriferina—cont. rostrata, Schloth, (Te- rebratulites), Nachtr. zur Petref., pl. xvi, f. 4; (Spirifer) Dav., Ool. Brach., p. 20, pl. ii., f. 1-6, 13-21 (non f. 7-12, nec pl. iii., f. 1), Sup., p. 95, pl. xi., f. 6; T. & B., p. 416.			T? Jm	1					TP?					•				
Signiensis ?, Buvig. (Spirifer) Mém. Soc Philom. Verdum., vol. ii. p. 14, pl. v., f. 9 : Géol des Ardenues, p. 534, pl iv., f. 9 : Dav. Mag. Nat Hist., 1852, p. 16, pl. xv. f. 3; Sup., p. 99, pl. xi. f. 11; T. & B., p. 417, pl xv., f. 7.										Jm								T. & B. (pl. xv., f. 7) in Jm.
Tessoni, Dav., Mag Nat. Hist., 1852, pl. xv. f. l, 2; Sup., p. 228, pl xxix., f. 21; Oppel, Jura p. 186; T. & B., p. 417.									o									
verrucosa, Von Buch (Detthyris), Petref remarg., pl. vii., f. 2 Mém. Soc. Géol. Fr. 1840, vol. iv., pl. x, f. 30 (Spirifer) Zieten. Verst. Würt., pl. 38, f. 2 Dav., Ool. Brach., p. 20 pl. iii., f. 1; Sup., p. 37 pl. xi., f. 9, 10; Simp. p. 234; Sp. mediævies Simp., 1855.	,						Si											Messrs. Tate and Blake consider Spiri- fer mediavies, Simp. a Palæozoic species. See Yorkshire Lias, p. 425.
Walcotti, Sow., M. C. t. 377, f. 2; Dav., Ool Brach., p. 25, pl. iii, f. 2, 3; Sup., p. 98; T. & B., p. 416, pl. xv. f. 9.	,			Ti Sil Ji Ji						T					P	S		
Walcotti, var. lata Martin, Infra Lias de le Côte d'Or, pl. vii., i 1-4; T. & B., p. 416 Sp. liasicus, recention Simp., p. 233.	;			T		Ţ												
Terebratula :		l																
acuta, Sow., v. Rhyn chonella.																		
bidens, Phil., v. Rh lineata.																		
calcicosta, Quenst., v Rhynchonella.																		
compressa, Simp., v. Rh tetrahedra.																		
florella, d'Orb., v. Wald heimia.																		i i

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. snnulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Terebratula—cont. lineata, Y. & B., v. Rhyn- chonella.																		
marsupialis, Ziet., v. W. perforata.															 			
mundula, Simp., v. Rh. plicatissima.					İ													
<i>perforata</i> , Piette, v. Waldheimia.																		
plicatissima, Quenst. v. Rhynchonella.	ĺ						İ											
psilonoti, Quenst., v. W. perforata.	1							-										
punctata, Sow., M. C., t. 15, f. 4; T. & B., p. 417; Dav., Ool. Brach., p. 45, pl. vi., f. 1-6; Sup., p. 130, pl. xvi., f. 6-8, 11, 12.									T 1	T 1 2 4 7						S 1 2 2 P 1 Jm 1		Probably the <i>T. trili-</i> neata of Hunton and Y. &. B.; and the <i>T. ornithoeephala</i> of Simp, 1855.
punctata, var. Ed- wardsii, Dav., Ool. Brach., p. 30, pl. vi., f. 11, 13-15; Sup., p. 130.																S		
resupinata, Phil., v. W. florella.					-			Į		1							Í	
rimosa, von Buch., v. Rhynchonella.	١				ļ									Ì				
tetrahedra, Sow., v. Rhyn- chonella.								İ						ł				
tridentata,Phil., triplicata, Phil. v. Rh. & Simp.,																		
Terebratulites:		Ì						ı	1									
rostrata, Schloth., v. Spirferina.	Ì							۱										
Thecidium: belemniticum, Tate, Yorksh. Lias, p. 416, pl. iv., f. 5.							T											Leptæna belemmitica, T. & B. Yorksh, Lizs, p. 88.
Waldheimia: florella, d'Orb., (Terebratula), Prod. I., p. 258; Desl., Brach. Jur., p. 115, pl. 26, f. 6, 7; Dav., Sup., p. 178, pl. xxiii., f. 11; T. resupinata, Phil., G. Y., pl. xiii., f. 23 (non Sow.); Wald. resupinata, var. Tate, Yorksh. Lias, p. 419, pl. xv., f. 13.										T 2 2 K 6						P 2		Dav. (pl. xxiii., f. 11) i Bm.

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· · · · · · · · · · · · · · · · · · ·				Lo	we	r.		_	Mid	dle.	_	Upp	er.	_				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoui.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Waldheimia—cont. florella, var. pyri- formis, Dav., Sup., pl. xxiii., f. 12, 13; W resu- pinata, var Tate, loc. cit., pl. xv., f. 12.										D						Jm		Types (f. 12) in Walker Coll., and (f. 13) in Jm.
Lycetti, Dav., Ool. Brach., p. 44, pl. vii., f. 17-22; Sup., p. 175, pl. xxiv., f. 30, 31; T. & B., p. 419.														T				
perforata, Piette (Terebratula), Bull. Soc. Géol. Fr. 1856, p. 188, pl. x., f. 1; Dav., Sup., p. 164, pl. xxiv., f. 1, 2, 3, and 5 ?; T. marsupialis, Zieten, Verst. Würt., p. 53, t. 39, f. 9 (non Schloth.); T. psilonoti Quenst., Jura, p. 48, t. 9, f. 21; W. sarthacensis, Tate, Yorksh. Lias, p. 418, pl. xv., f. 10, 11.			T 1 6			T 1	T 3 Jm			T						Jm		
resupinata, 2 vars., Tate, v. W. florella. sarthacensis, Tate, v. W. perforata.																		
LAMELLIBRANCHIATA. (MONOMYARIA.)																		!
Anomía: alpina, Winkler, Schichten der Av. contorts, p. 5, t. 1, f. 1, 2; T. B., p. 361; An. pellucida, Terquem, Pal. de Hett., p. 112. t. xv., f. 5.			T															
numismalis, Queust., Jura, p. 311, t. 42, f. 2; T. & B., p. 361.						T	T	Ţ	T	T				1	-			
pellucida, Terq., v. An. alpina.		l												: 				,
striatula, Oppel. Jura- formation, p. 107; Ter- quem & Piette, Lias Inf. de l'Est de la France, p. 113, t. xiv., f. 5; T. & B., p. 361.			T															
Avicula: calva, Schlönhach, Zeits. Deutsch. Geol. Ges., Bd. xv., t. xiii., f. 2; (Monotis) T. & B., p. 371.								T	Ţ	т						Jm		
contorta, Portlock, Geol. Rep. on London- derry, p. 126, t. xxv., f. 16; (Cassianella) Fflucker, Zeits. Deutsch. Geol. Ges., 1868, p. 408, t. vii., f. 2; T. & B., p. 373.	S 5 T 2 3																	

				L	owe	er.			Mid	ldle.		U p	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus,	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. sunulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(Monomyaria)—cont.																		
Avicula—cont. crescens, Simp., v. Av. substriata.		ĺ																
cygnipes, Y. & B., (Pecten), 1822, pl. ix., f. 4, 6; 1823, p. 236, pl. ix., f. 3, 4; (Avicula) Phil., G. Y., pl. xiv., f. 3; Simp., pl. 81; (Monotis) T. & B., p. 370.									T 1 2 4 Jm	T 1 2 Jm						S 2 4 P 4		
echinata, Sow., (pars), v. Av. fallax.																		
inæquivalvis, Sow., M. C., t. 244, f. 2; Phil., G. Y., pl. xiv., f. 4; (Monotis) T. & B., p. 371; Pecten crescens, Y. & B., p. 287; pl. ix., f. 16; Avicula novemcosta, Brown, Foss. Conch., p. 162, pl. lxvi., f. 12; Av. sinemuriensis, d'Orb., Prod. I., p. 219.				T 7 Jm	T		1 1 2 2	Jm S	T 7 7 Jm S 1	Jr 3 3 4 Jm	T		T 1 2	T Jm	S ₇	87		
fallax, Pflucker, Zeits. Deutsch. Geol. Ges., 1868, Bd. xx., p. 409; (Monotis) T. & B., p. 371; Av. echinata, Sow., (pars) M. C., t. 243, f. 2.	T	T 6														i		According to Pflucke this is the Monoti decussata, Auct. Angle (non Münster).
minima, Simp., v. Av. sub- striata.								ì										
nitescens, Simp., v. Av. substriata.																		
novemcostæ, Brown, v. Av. inæquivalvis.		l																ļ
 papyria, Quenst., (Monotis) Jura, p. 109, t. 13, f. 31, 32; T. & B., p. 372. 				T						T	T 1					8 2		
Pattersoni , Tate, Irish Lisssic Foss., p. 18, pl. 1, f. 10; T. & B., p. 370.		ĺ	T 6												!			
sinemuriensis, d'Orb., v. Av. inæquivalvis.																	ĺ	
substriata, Zieteu, 1830, p. 93, pl. 69, f. 9; (Monotis) Münster, Braun's Jahrb., 1831, p. 406; Goldf., 1836, p. 138, pl. 120, f. 7; T. & B., p. 372; Pecten crescens (pars) Y. & B., p. 237; Av. minima, nitescens tumidulus, crescens, Simp., p. 182.										T		T. 2	Ţ Jm	Ţ			Jm S	
tumidulus, Simp., v. Av. substriata.																		

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				L	owe	r.	_		Mid	ldle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(MONOMYARIA)—cont. Cassianella: contorta, v. Avicula. Chama: succincta, Schloth., v.													; ;					
Lima. Crenatula: ventricosa, Sow., v. Inoceramus.																		•
Gervillia: prosa, Simp., 1855, p. 111; T. & B., p. 378, pl. xiv., f. 6.							Ţ	T Jm				ŀ						Type in Jm.
Hagenowii, Dunker, Lias bei Halberstadt, 1846; Pal. I., 1851, p. 37, t. vi., f. 9-11; T. & B., p. 373.				T Jm	T				1									
pinnæformis, Dunker, v. Inoceramus.											İ							
rugata, Simp., v. Inocera- mus Simpsoni.											l							
Gryphæa: arcuata, Lam., (Ostrea) Anim. sans vert., p. 368; T. & B., p. 359; Gryphæa incurva, Sow., M. C., t. 112, f. 1, 2; Y. & B., p. 242, pl. viii., f. 18.	1		T	T 1 2 3	Ţ		•			•					P S			
cymbium, Lam. Anim. s. vert., vol. vi., p. 198.		ļ																
var. obliquata, Sow., M. C., t. 112, f. 3; Goldfr, p. 30, t. 85, f. 2; T. & B., p. 360; G. Macullochi, Simp., p. 167					T	1	T I Jn	S							S 1 2 P			
var. depressa, Phil., G. Y., pl. xiv., f. 7; T. & B., p. 360; Gryphites gigas, Schloth, Petref., p. 286; G. Maccullochii, Sow., M. C., t. 547, f. 1-3; Ostrea concinna, infata, patellaformis, tumidulosa and G. orbicularis, Simp., p. 164.								T 1 2	T1 2 4 S1						P	S 2 4 5		
depressa, Phil., v. G. cymbium.																		
incurva, Sow., v. G. arcuata.										-								
Maccullochii, Sow., v. G. cymbium.																		
obliquata, Sow., v. G. cymbium.						I		! !										

				L	OW6	er.			Mic	ldle.		Up	per					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Åm. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(Monomyaria) —cont. Gryphæa—cont. orbicularis, Simp., v. G. cymbium. Gryphites: gigas, Schloth., v. G. cymbium. Harpæx: calva, Desl., v. Plicatula. Hinnites: papyraceus, Zieten, (Pecten) Verst. Würt., p. 70, t. 53, f. 5; T. & B., p. 365. tumidus, Zieten (Pecten) Verst. Würt., p. 68, t. 52, f. 1: T. & B., p. 365; P. velatus, Goldf. Petref., p. 45, t. 90, f. 2; (Spondylus) Ibid., p. 94, t. 105, f. 4; Hinnites velatus, L. & M. Ool. Biv., p. 14, t. 2, f. 2. velatus, L. & M., v. H. tumidus.										Ta			Ţ					·
## Cinctus, Münster, Goldf., p. 110, t. 115, f. 5; Oppel, Jura, p. 261; T. & B., p. 376. ### Cinctus, Sow. M. C., t. 584, f. 3; "Pyritons mussel," Y. & B., pl vii., f. 3; Phil., G. Y., pl xii., f. 14; Simp., p. 179; T. & B., p. 375; Ostrea sattvictensis, Simp., p. 164. #### Cinctus Control of C				T		T	-	T	T	Ti	Ţs	T 7	Orti		Jni		S 7 P 1 Jm 1	

				L	owe	r.			Mid	ldle.		Up	per.					
Species.	Bhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(MONOMYARIA)-cont.													l i					1
antiquata, Sow., v. L. suc-																		
encharis, d'Orb., Prod. I., p. 257; T. & B., p. 366.							T 1		T	T 2						Jm		Near to L. gigantea.
excavata, Simp., v. L. gigantea.																		
gigantea, Sow. (Pla- giostoma), M.C., t. 177; Simp., p. 175; T. & B., p. 366; L. excavata, Simp., p. 176.		T 6	T 1 6	T	T,?										Jm P 1 S			
Rermanni, Voltz, Zieten, Verst. Würt., t. 51, f. 2; Phil., G. Y., pl. xiv., f. 18; T. & B., p. 365; Plag. rusticum, Y. & B., p. 225; Lima irregularis, multicos- tata, Simp, p. 173.							Ţ	T	T Sm	T 2					P			Phil. (pl. xiv., f. 18) Ym.
Hermanni, Goldf., v. L. succincta.														1				
hettangiensis, Terquem, Pal. de Hett., p. 320, t. 28, f. 1; T. & S., p. 367.			T	T														Resembles L. dupl cata, Sow.
irregularis, Simp., v. L. Hermanni.						•											!	
multicostata, Simp., v. L. Hermanni.				i														•
novemccstata, Simp., v. Limea acuticosta.																		
pectinoides, Sow. (Plagiostoma), M. C., t. 114, f. 4; T. & B., p. 367.			T 1 2 6	Ţ	Ţ	S									8	80.		Common in the angulatus and Buckland beds.
pectinoides, Phil., v. Limea acuticosta.		İ																
 punctata, Sow. (Plagiostoma), M.C., t. 113, f. 1, 2; Goldf.; Petref., p. 81, t. 101, f. 2; L. & M., p. 180, pl. xv., f. 9 a, b; T. & B., p. 366. 			T 3															
runsviciensis, Simp., v. Pecten æquivalvis.																		
succincta, Schlotheim (Chama), Min. Tasch., Srd sup., t.v., f. 4; T. & B., p. 365; L. antiquata, Sow., M. C., t. 214, f. 2; L. Hermanni, Goldi., p. 80, t. 100, f. 5.			T	T 1 Jm 1					Jm							8		Resembles L. He manni.

				L	owe	er.	1		Mic	ldle.		Up	per					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jemesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(MONOMYARIA)—cont. Lima—cont.			T				.											
Terquemi, Tate, Geol. & Nat. Hist. Rep., 1867, p. 395; T. & B., p. 365; <i>L. tuberculata</i> , Terquem, Pal. de Hett., t. xxiii, f. 3 (non Breccbi).			6															
champs, Bull. Soc. Linn. de Norm., 1856, p. 79; T. & B., p. 367.		:											. ;	T 1				Related to L. gigantea
tuberculata, Terq., v. L. Terquemi.														'				
Timea: aouticosta, Münster. Goldf., p. 193, t. 197, f. 8; T. & B., p. 367; L. pectinoides, Phil., G. Y., pl. xii., f. 13; L. pectinoides, novemcostata, Simp., p. 174.							T 2 3 5	T	T 1 3	T 1 2	T 2 4 Jm 2				P			Lima galathea of T. & B., Part I. Abundant.
blakeana, Tate, Yorksh. Lias, p. 368, pl. xiv., f. 5; Cardium profundum, Blake, Q. J., G. S., vol. xxviii., p. 143.			T 6	T				,							Jm			Type in Jm M
juliana, Dumortier, Dep. Jur., vol. iii., p. 289, t. 34, f. 7, 8; T. & B., p. 368.							Jm	:		Ţ								Resembles L. peeti- noides.
Monotis, v. Avicula.																		
Ostrea: arcuata, Lam., v. Gry- phæa.																		
.auricularis, Münster, v. O. subauricularis.																		
concinna, Simp., v. Gry- phæa cymbium.							í	;							1	300		
cymbium, Lam., v. Gry- phæa.								1	en senten									
Goldfussi, Bronn., in Ersch. Grub. Ency., iii., sect. vii., p. 199; 'I. & B., p. 358; O.laviuscula, Münster, Goldf., p. 20, t. 79, f. 6 (non Sow.); O. irregularis, Terq., Pal. de Hett., p. 185, t. xiv., f. 2; Dum., Dep. Jura., pt. ii., t. 49, f. 1-3,				T Jm	T		T	the state of the s	an - Asimophismenischer dans - s	•						S ₂ ?		
inflata, Simp., v. Gry- phæa cymbium.																		
irregularis, Terq., v. O. Goldfussi.																		

				Ι	ow	er.			Mi	ddle.		Uŗ	per					-
SPECIES.	Rhætie Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesooi.	Am. capricornus.	Am. margaritatus.	Am. Spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(MONOMYARIA)—cont.																		
Ostrea-cont.																	ŀ	
irregularis, Quenst., v. O. ungula.																		
læviuscula, Münster, v. O. Goldfussi.																		
Hassica, Strickland, Murch. Geol. Chelt., p. 99; Phil., Thames Valley, pl. vii., f. 47; T. & B., p. 357; O. sublamellosa, Dunker, Pal., i. t. vi., f. 41.	T	T 2 3 6													Ø3 6			
patellæformis, Simp., v. Gryphæa cymhium.																		
saltviciensis, Simp., v.Ino- ceramus dubius.																		•
semiplicata, Münster, Goldf., p. 4, t. lxxii., f. 7; T. & B., p. 358.			T 1 6	T													ŀ	
Sportella, Dumortier, Mém. Soc. Agr. Lyon, 1857, p. 3, t. 1, f. 1-8; Dep. Jura, vol. iii, pp. 144, 316, t. xxii, f. 6, 7, and t. xli, f. 3-7; T. & B., p. 359.						T ₆ ?	T ?	1		T Jm								
Subauricularis, d'Orb. Prod. I., p. 257; T. & B., p. 359; O. auri- cularis, Münster, Goldf., 2, p. 20, pl. 79, f. 7 (uon Walh).													T	T			Jm 1	
sublamellosa, Dunker, v. O. liassica.																		
submargaritacea, Brauns, Pal., vol. xiii., p. 101, t. xxiv., f. 6, 7; T. & B., p. 359.								,	Ţ	T 2 Jm 1				şĒ.		84		
tumidulosa, Simp., v. Gryphæa cymbium.						İ			,					4				
ungula, Münster, Jahr! fur Min., 1833, p. 325; T. & B., p. 358; O. irregularis, Quenst., Jura, t. 3, f. 15.	Ym?		T 1 2 6	Ţ		_	- :					ŀ	,	The company of the second seco				
Pecten:																		j
equalis , Quenst., Jura, t. 9, f. 13; T. & B., p. 863; ? <i>P. multicostatus</i> , Simp., p. 170.		T 6			T 1 6									and spirits profession	P		-T#~	

				1	Low	er.	-		Mi	ddle		Up	per.	·_				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurenis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks
(MONOMYARIA)—cont. **Pecten—cont. **Equivalvis, Sow.,							T1 3 4	Ŧ	Ti	T1 8 9 4	T 1 2				87	\$ 7 P		
aheneus, Simp., v. P. æquivalvis. calvus, Goldf., p. 74, t. 99, f. 1; T. & B., p. 362; P. subulatus, Münster, Goldf., p. 93, t. 98, f. 12. crescens, Y. & B., v. Avicula inæquivalvis, and Av. substriatus. cygnipes, Y. & B., v. Avi-			Ţ	T 1 Jm	T I Jm	T		Ţ	T 1 5									
eula. dichotomus, Simp., v. P. priscus. disciformis, Schübler, Zieten, Verst. Würt., p. 69, t. 53, f. 2; T. & B., p. 885. interstinctus, Simp., v. P. priscus. lamellosus, Y. & B., v. P. lunularis. liasianus, Nyst., v. P.														Ŧ				
Iunularis. lohbergensis, Emerson, Zist. Deutsch. Geol. Ges., vol. xxii., p. 316, t. ix., f. 4.; T. & B., p. 362.				Ţ														
Verst. Ool. Nachtrag, p. 26; T. & B., p. 361; P. (cf.) lamellosus (Sow.), Y. & B., p. 235; P. liasianus, Nyst., 1849. Dunksr, Oppel, &c. P. pulchellus, P. planus, Simp., p. 171.				P 1				1	1 8 4]	T 1 9 m				נ		51		
major, Y. & B., v. P. gequivalvis. multicostatus, Simp., v. P. gequalis.																		

				1	20W	er.			Mi	ddle.	1	Ur	per					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinstus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am, jurensis.	Lower Lias.	Middle Lias.	Upper Liss,	Remabks.
(Monomyaria)—cont. Pecten—cont. papyraceus, Ziet., v. Hinnites. personatus, Ziet., v. P. pumilus. planus, Simp., v. P. lunularis. pollux, d'Orb., Prod. I., p. 290; Dum., Dep. Jura., pt. i., p. 65. t. x., f. 11, 12, and t. xi., f. 1-4; T. & B., p. 362. priscus, Schloth., Petref., p. 222; Goldf., p. 78, t. iv., f. 10; T. & B., p. 364; P.P. sublavis, Phil., G. Y., pl. xiv., f. 5; P. interstinctus, dichotomus, Simp., p. 169. pulchellus, Simp., v. P. lunularis. pumilus, Lamarck, Anim. s. vert., vol. vi., p. 183; T. & B., p. 364; P. personatus, Zieten, Verst. Würt., t. 52, f. 2; Goldf., t. 99, f. 5. punctatissimus, Quenst., v. P. substriatus. reticularis, Simp., v. P. substriatus. reticularis, Simp., v. P. substriatus. reticularis, Simp., v. P. substriatus. reticularis, Quenst., v. P. substriatus. sublævis, Y. & B., v. P. æquivalvis. sublævis, Phil., v. P. priscus and P. æquivalvis. substriatus, Römer, Verst. Ool., p. 71; T. & B., p. 362; P. reticularis, punctatus, Simp., p. 171; P. strionatis, Quenst., Jura, p. 185; P. reticularis, punctatus, Simp., p. 171; P. strionatis, Quenst., Jura, p. 187; t. 18, f. 21; p. 183, t. 23, f. 2.		7.	T i e	T Jm 1	Tro.		Tis	Ti	Ţ Jm	Ta	T	Ta	Ti a	Ti		P		Resembles P. æquivalvis. P. interstinctus, Simpson, occurs in the zone of Am. margaritatus, or Am. spinatus.

				L	owe	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am, planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(Monomyaria)cont.																		
Pecten—cont. subulatus, Münster, v. P. calva.								* 500										
textilis, Münster, Goldf., p. 43, t. 89, f. 3; T. & B., p. 362.			T ₆															
textorius, Schloth., (Pectinites), Petref., p. 229; Goldf., p. 45, t. 89, f. 9 a, b; T. & B., p. 363.			Ţ	T J m				of a complete was a										
Thiolieri, Martin, Pal. de la Côte-d'Or. p. 89, t. vi., f, 21-23; T. & B., p. 363.				T Jm														
tumidus, Ziet., v. Hin- nites.								1				ŧ						
velatus, Goldf., v. Hinnites tumidus.								1										
verticillus?, Stoliczka, Sitz. Akad. Wiss., Bd. xliii., 1860, p. 197, t. vi., f. 3, 4; T. & B., p. 364.								ACT on the second of the		T								1
erna:								7 !										
antiqua, Moore, v. P. lugduneusis.																		
infraliassica, Quenst., Jura, t. 4, f. 19; T. & B., p. 373.			T 1 6	Ţ											J_{1}^{m}	1		
lugdunensis, Dum., Dep. Jur., vol. iii., p. 297, t. 88, f. 1, 2; T. & B., p. 374; ? P. antiqua, Moore, Mid. and Up. Lias, p. 102; ? P. quadrata, Y. & B., 1828, p. 221.										T ₂								Bean Coll. Bm.
quadrata, Y. & B., v. P. lugdunensis.							,											
quadrata, Simp., v. Pinna folium.								4										
inna:																		
folium, Y. & B., pl. x., f. 6; Phil., G. Y., pl. xiv., f. 17; Simp., p. 184; T. & B., p. 376; Perna quadrata, Simp., 1855.					T	T 1	Ţ	and desired to the second of the							P			Abundant in the Ja soni-beds.
Hartmanni, Zieten, Verst. Würt., t. 55, f. 5; T. & B., p. 376; <i>Pinna</i> semistriata, Blake, Q. J. G. S., vol. xviii., p. 143.				T I Jm	Ţ													

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	ì]	Low	er.			Mi	ddle.		Up	per					
Sprcies.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni,	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(MONOMYARIA)—cont. Pinna—cont. semistriata, Blake, v. P. Hartmanni. spathulata, Tate, Yorksh. Lias, p. 376, pl. xiv., f. 2. Plagiostoma, v. Lima.				in the second se						T ₂ J _m W _m	ì			and the second s				:
rusticum, Y. & B., v. Lima Hermanni, Plicatula: calva, Desl., (Harpax) Plic. Foss., p. 57, t. xii., f. 10-13; T. & B., p. 369; Placuna ferruginea, Simp., p. 177.									Ţ	T ₁		•	- 1					• /
liasina, Terquem, (Spondylus) Pal. de Hett., p. 327, i. 23, t. 7; Terquem & Piette, Lias Inf., p. 107, t. xiii., f. 11-13; T. & B., p. 369. spinosa, Sow., M. C., t. 245, f. 1-4; Y. & B., t. ix., f. 6; Phil., G. Y., pl. xiv., f. 15; Simp., p. 178; T. & B., p. 369.			T 1 6 Jm 1	Ţ			T 1 2 Jm	Ţ	Jm 1 2	T 2			*		P			Abundant in the angulatus-zone. Abundant in zone of Am. Jamesoni, rare in zone of Am. capricornus. Possibly another species in
Posidonomya: Bronni. Voltz, Zieten, Verst. Würt., t. 54; f. 4; Goldf., t. 113, f. 7; T. & B., p. 373. Spondylus: liasina, Terquem, v. Plicatula. velatus, Goldf., v. Hinnites tumidus.												T 1 3 4	:			J	S 1 m	zone of Am. spinatus.
LAMELLIBRANCHIATA. (DIMYARIA.) Amphidesma: æqualis) Simply Bland																		
contracta Simp., v. Pleuromya. irregulare, Simp., v. Gresslya donaciformis. rotundata, Ziet., v. Pleuromya. Arca: Buckmani, Richardsen, v. Macrodon.														The state of the s				·

				J	ow	er.			Mi	ddle.		Up	per.					
Species	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Arca—cont. Lycetti, Moore, v. M. hettangiensis. numismalis, Tate, v. M. intermedius. pullus, Terq., v. Macrodon. rostrata, Y. & B., v. Leda ovum. securiformis, Simp., v. Cypricardia cucullata. Arcomya: arcacea, Seebach, (Pleuromya) Hann. Jura, p. 123, t. v., f. 4; Brauns, Unt. Jura, p. 307; T. & B., p. 410. concinna, Tate, Yorksh. Lias, p. 411, pl. xi., f. 1. elongata, Bom., (Pano- pæa), Verst. Ool., p. 126, t. viii., f. 1; T. & B., p. 410; Sanpuinolaria striata, Buck., Geol. Chelt., t. x., f. 10; Pano- pæa pelea, d'Orb., Prod. L., p. 233. hispida, Simp., 1855, p. 126; T. & B., p. 411, pl. xiv., f. 3. longa, Buvig., (Pano- pæa) Géol. de la Meuse, p. 6, t. vii., f. 1-3; T. & B., p. 410, pl. xi., f. 11; P. broliensis, Buvig., p. 6, t. viii., f. 6, 7. vetusta, Phil., (San- guinolaria) G. Y., pl. xiv., f. 1; Simp., p. 219; T. & B., p. 410. Astarte: amalthei, Quenst., v. A. striato-sulcata. cingulata, Terquem, Pal. de Hett., t. xx., f. 6; T. & B., p. 387. Guenxii, d'Orb., v. A. obsoleta. minima, Phil., v. A.			Tr.	Ti Jm i	T	T1 5 5 Jm 1 2	Tla		T	Ti Jm Jm Jm Jm Jm Jm					P			Whitby Muscum. T. & B. (pl. xi., f. 11) in Jm. = Arcomya petræof T. & B., Part I.

				L	we	r.			Mid	dle.	. 1	Upp	er.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks
(Dimyaria)—cont.																		
Astarte—cont. obsoleta, Dunker, Pal. I., p. 178, t. xxv., f. 8, 9; T. & B., p. 387; A. Gueuxii, d'Orb. Prod., I., p. 216; A. psilonoti, Quenst., Jura, p. 45, t. 3, f. 14.		Ţ	T 1 2 6	T	Ţ													
Oppeli, Andler, Neues Jahrb., 1858, p. 642; T. & B., p. 387; A. saulensis, Terquem & Piette, Lias Inf., p. 74, t. vi., f. 25, 26.			T 6 Jm	1											P			
psilonoti, Quenst., v. A. obsoleta.																		
resceta, Dum., Dep. Jura, iii., p. 122, pl. xix., f. 7.																Jņ		Upleatham.
rugata, Quenst., (Iso- cardia) Jura, t. 23, f. 26; T. & B., p. 388.										T								
saulensis, Terq., v. A. Oppeli.		l							İ									
striato-sulcata, Rôm. Verst. Ool., p. 112, t. vii., f. 16; T. & B., p. 388, pl. xi., f. 7; A. amalthei, Quenst., Jurs, t. 23, f. 12, 13; ? A. minima, Phil.							T 1 2	Ţ	T	1 2 4 6	T 7					Jn	1	Probably the Astart minima recorded by some authors.
Axinus: cloacinus, Moore, v. Iso-		l									l	ŀ			ŀ			
donta Ewaldi.		l																(Phillips (pl viii f 16
Cardinia: antiqua, Phil., (Pullastra), G. Y., pl. xiii., f. 16; T. & B., p. 390.									T 1 Jm									(Phillips (pl. xiii., f. 16 in Ym., Called P. prototypa in Geol. Yorksh. 2nd Ed. 1835, p. 133, and C. crassiuscula, ir 3rd Ed. 1875, p. 254.
attenuata, Stutchbury Pachyodon), Ann. Nat. Bist., vol. viii., 1842, p. 485, t. x., f. 13, 14; T. & B., p. 390; C. lan- ceolata, Ag., Et. Crit. Myes, t. xii., f. 1-3.							Т							confirmation to 1177		,		
concinna, Sow. (Unio), M. U., t. 223, f. 1, 2; T. & R., p. 389; Pachy- odon lanceolatus, Stutchbury, Ann. Nat. Hist vol. viii., 1842, p. 484; (Cardinia) Morris Cat.				T Jn											Jn 1 S 1 P			U.L. & M.L. Whith (Phillips).
crassissima, Sow. (<i>Unio</i>), M. C., t. 153; T. & B., p. 391.										T								Cast only.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
(DIMYARIA)—cont. Cardinia—cont. crassiuscula, Sow. (Unio), M. C., t. 185; T. & B., p. 389, pl. xiv., f. 4.				T Jm											S			T. & B. (pl. xiv f. 4) in Jm.
Pal. de Hett., p. 299, t. xix., f. 6; T. & B., p. 390.			T															
Desoudini , Terquem, Pal. de Hett., p. 300, t. xx., f. 1; T. & B., p. 390.			T		A CASE AND													
laevis, Y. & B. (Cardita), p. 226, t. vii., f. 14; (Isocardia), Simp., p. 198; (Cardinia) T. & B., p. 391, pl. xi., f. 12.					manage states of the states of				T	T 1 2 4						Jm 2		T. & B. (pl. xi., f. 12) in Jm.
lanceolata, Ag., v. C. attenuata.					T													
lanceolata, Morris, v. C. concinna.									:		-							
Listeri, Sow. (<i>Unio</i>), M. C., t. 154, f. 1, 3, 4; T. & B., p. 389.			T 1 2 6	T 3 Jm											P Jm			It is doubtful whether these should be separated. The loca-
Listeri, v ar. hybrida, Sow., M. C., t. 154, f. 2.				Ť	T								Ì			S?		lities probably refer to both:
Listeri, var. ovalis, Stutchbury. (<i>Pachyodon</i>) Ann. Nat. Hist., vol. viii., 1842, t. x., f. 17- 19; T. & B., p. 390.		T 3	T 1 2 6												P			j
Cardita: Heberti, Terquem, Pal. de Hett., t. xx., f. 10; T. & B., p. 388.			T f Jm	T I Jm														Common at Redcar.
lævis, Y. & B., v. Cardinia.																		
liasiana, Moore, v. C. multicostata.																		
multicostata, Phil., (Cardium) G. Y., pl. xiii., f. 21; Simp., p. 204; T. & B., p. 588, pl. xii., f. 7; Cardita Vasiana, Moore, Mid. and Up. Lias, p. 98, t. vii., f. 9.					,		T		T Jm	T Jm					P 1			Type in Ym. T. & B. (pl. xii., f. 7) in Jm.
nitida, Y. & B., Ceromya exarata.																	,	
Cardium: cucullata, Munster, v. Cypricardia.			;															No. 7

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
		<u> </u>		1	,						i	<u> </u>				Ì	1	
(DIMYARIA)—cont. Cardium—cont. deltoideum, Y. & B., v. C.																		2 FOREST TO 12 FOR
truncatum. multicostatum,, Phil., v.								,										
Cardita. oxynoti , Quenst., Jurs, t. 13, f. 46; (<i>Protocardium</i>) T. & B., 395; <i>C. triangulare</i> , Simp., p. 205: (<i>Arca</i>) Simp. 1855.					T Jm	T 3 6												Ħ
pectinatum, Y. & B., v. C. truncatum.																		
philippianum, Dun- ker, Pal. I., p. 116, t. 17, f. 6; (Protocardium) T. & B., p. 395; C. rhæ- ticum, Merian, Escher von der Linth, Geol. Bemerk. u. d. Nördl. Vorarlberg, p. 19, t. iv., f. 40, 41.	85 T 2 3	T 2 3 6	T 1 6	Jm														ा देश आहे.
profundum, Blake, v. Limea blakeana.					-													
rhæticum, Merian, v. C. phillippianum.								Office and										
securiforme, Simp., v. Cypricardia cucullata.					- Sp. Sp. Call													
striatulum, Phil., v. C. snbstriatulum.															i			
substriatulum,d'Orb, Prod. I., p. 279; (Pro- tocardium) T. & B., p. 394; C. striatulum, Phil., G. Y., pl. xi., f. 7 (non Broecht).					e en 1 (), commission de la commencia de la co									Ti				
triangulare, Y. & B., v. C. truncatum.					?	•								7				
triangulare, Simp., v. C. oxynoti.																		· silmens .
truncatum, Sow., M. C., t. 553, f. 3; Phil., G. Y., pl. Xiii., f. 14; (Protocardium) T. & B., p. 394; C. pectinatum, Y. & B., 1822, pl. viii., f. 5; C. deltoideum, Y. & B., 1828, pl. viii., f. 5; C. triangulare, Y. & B., 1828, p. 228.							T 1 3	T	T 7	Jm	T				Si	Pis		
Ceromya :										_				,				
bombax, Quenst. (Venus) Jura, t. 23, f. 21; T. & B., p. 408; (Isocardia) Brauns, Unt. Jura, p. 329, t. ii., f. 5-7.										T								

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Species.	Rhætic Beds.	Am. planorbis.	Am. ungulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am margaritatus.	Am. spinstus.	Am. annulatus.	Am. serpentinns.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Llas.	REMARKS.
(DIMYARIA)—cont. Ceromya—cont. exarata, Tate, Yorksh. Liss, p. 409, pl. xiii, f. 6; Cardita nitida, Y. & B., p. 227, pl. viii., f. 22; Isocardia nitida, Simp., p. 1299. gibbosa, Etheridge,			T									Ţ					,	Whitby Museum.
gibbosa, Etheridge, Q. J. G. S., vol. xx., p. 112, f. S., vol. xx., p. 112, f. S., tp. 407; Isocardia Elea, d'Orò, Prod. I., p. 218. petricosa, Simp., (Venus), 1855, p. 121; T. & B., p. 408, pl. xiv., f. 1 a, b.; Isocardia liassica, Moore, Up. & Mid. Lias, p. 101, t. vii., f. 3.			1						T Jm	T ,						P		T. & B. (pl. xiv., f. 1) 1 Jm.
sublee vis, Tate, Yorksh. Lias, p. 408, pl. xii., f. 6. Corbis: uniformis, Phil., v. Leda subovalis.										Ţ Jm								Resembles C. gibbosa Type in Jm.
Corbula: @quivalvis, Simp., deltoidea, Simp., inæquivalvis, Simp.,																		
Corimya: glabra, Ag., v. Thracia. Cucullæa: cucullata, Port., cuspidata, Simp., expansa, Simp., intermedius.																		
Grangeri, Tste., hettangiensis, Terquem, v. Mscrodon. incrassata, Simp., v. M. intermedius. intermedia, Simp., v. Macrodon.																		

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				L	owe	r.			Mid	dle.		Up	er.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Cuculisea—cont. Münsteri?, Zieten, Verst. Würt., p. 75, t. 56, f. 7: Quenst., Jura, t. 18, f. 34; t. 23, f. 8; T. & B., p. 381; C. obtusatis, Simp., p. 186. navicula. Terquem, v. Macrodon. obtusatis, Simp., v. C. Mün-					T	R = 1.00 (1)	T	T										Non C. Münsteri, T. & B., Part I.
steri. Cypricardia: cucullata. Münster, (Cardium) in Goldf., p. 218, t. 143, f. 11; A. B., p. 391; Cardium securiforme, Arca: securiforme, Simp., 1855; ? Cypricardia inter- media, and C. pellucida, Moore, Mid. & Up Lias, p. 99, 100, t. vii., f. 5, 6. inclusa, Terq., v. Myocon- cha. intermedia, Moore, v. C.							T		T	Tis	Ta					P		T. & B. include these with Coucultata, but
pellucida, Scucullata. Gontomya: heteropleura, Ag., Et. Crit. Myes, p. 24, t. 1d, f. 9, 10; T. & B., p. 400; Mya rhombira, Quenst. Jura, t. 10, f. 5. hybrida, Münster, (Ly- sianassa) Goldf., p. 263, t. 154, f. 10; T. & B., p. 400; Mya literata, Simp., p. 220.				T			T		T	T ₁	Ŧ					P		the southern forms seem to be distinct species. G. literata, Phil., G. Y. p. 256.
literata, Simp. (non Sow.), v. G. hybrida. Gresslya: abducta, Phil., (Unio) G. Y., p. 256, pl. xi., f. 42; T. & B., p. 401; Myacites rotundata, Simp., p. 214. ANGLICA, Ag. Etud. Crit. Myes, p. 217, t. 13c, f. 10- 12. donaciformis, Phil., (Myacites) G. Y., pl. xii., f. 5; T. & B., p. 400; Amphidesma irregulars, Simp., 1855, p. 124; f. Donax sp. Y. & B., pl. vii., f. 12.													T	T Ju		85 1	P 1 Jm	Type in Ym. is from the Inf. Ool. "Lias, England" (Ag.) "Yorkshire" (Morris). Common in the upper part of the Alum Shale.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lins,	Upper Lius,	REMARKS.
(DIMYARIA—cont.) Gresslya—cont. galathea, Ag. (Pleuromya) Btud. Crit. Myes, p. 239, t. 28, f. 1-3; T. & B., p. 400. granata, Phil., v. Pleuromya. intermedia, Simp. (Amphidesma), 1855, p. 125; T. & B., p. 403, pl. xiii., f. 8; Myacites dubia, Simp., p. 211; Pholadomya tovis, Ibid., p. 233; ? Myacites rotundatus (pars) Phil., G. Y., pl. xii., f. 6; ? Donax sp., Y. & B., p. 224. lunulata, Tate, Yorksh. Lías, p. 402, pl. xii. f. 10; Pholadomya rostrata, rostellata, Simp., p. 225. punctata, Simp. (Amphidesma), 1855, p. 124; T. & B., p. 401, pl. xiv., f. 10. rotundata, Phil., (Myacites) G. Y., pl. xii., f. 6; T. & B., p. 401, pl. xiv., f. 10. seebachii, Brauns, Pal., vol. xiii, p. 100; T. & B., p. 402, pl. xiii, f. 3; G. ventricosa, Seebach, Han. Jur., p. 128, t. vi., f. 1; Myacites maculata, subtruncata, levis, Simp., p. 215; ? Pholadomya obtiquata, phil., G. Y., pl. xiii, f. 15; Umbo abductus (pars), Phil. striata, Ag., Étud. Crit. Myes, p. 219, t. 13 c, f. 7-9; T. & B., p. 400; Myacites subtriangu- laris, mediæva, concava, Simp., pp. 211, 213, 216. ventricosa, Seebach, v. G. Scebachii. lettangia, v. Tancredia.	E .	A	T	T ₁	711	Y 10 to 10 The state of the sta		Α	T1 2 4 Jm 2 T1 Jm 1	T 2 4 Jm	V	V .		Jm 1	T P S/I		Pi	Abundant. T. & B. (pl. xiii., f. 8) Jm. Type in Whitby Museum. Closely allied to pinguis, Ag. T. & B. (pl. xiii., f. 3) i Jm. Abundant.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinstus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Hippopodium—cont. ponderosum, Sow., M. C., t. 250; Y. & B., p. 227, pl. vii., f. 13; Simp., p. 198; T. & B, p. 392; Mytilus hippo- campus, Y. & B., p. 221, pl. vii., f. 4; M. rusticus, hippocampus, similis, Simp., p. 197; Hippo- podium ferri, Ethe- ridge, Q. J. G. S., vol. xxxi., p. 127, pl. v., f. 6. Homomya:			T 1 3	T	T		T	Ti	T i S i J m	T					Pi			. ,
ventricosa, Ag., v. Pholadomya. Isocardia: bombax, Brauns, v. Ceromya. Elea, d'Orb., v. Ceromya gibbosa. lævis, Simp., v. Cardinia. liassica, Moore, v. Ceromya petricosa. Leda nitida Simp., v. Gadaha de Ceromya exarata. rugata, Quenst., v. Astarte. Isodonta: Ewaldi, Bornemann, (Taniodon), Lias b. Göttingen, p. 68; T. & B., p. 394; Opis cloacinus, Quenst., Jura, pl. i., f. 35; (Schizodus) Oppel & Suess; (Avinus) Moore, Q. J. G. S., vol. xvii., pl. xv. f. 16. Leda: æquilatera, Koch and Dunker, (Tellina) Verst. Ool., p. 30, t. ii., f. 9; T. & B., p. 382, pl. xi., f. 10; Nucula tellinaformis, Simp., p. 192; P.L. rostralis, (Lam.) Phil., G. Y., 1875, p. 249. Bronni, Andler, v. L. subovalis.		C 3 3 5 5					A hard and a second sec						X X	T J 1 2 2	n	a company and properly allows after the company of	Jm	T. & B. (pl. xi., f. 10) is Jm.

				I	ow.	er.			Mid	ldle.		Up	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
(DIMYARIA)—cont.																		}
complanata, Goldf., (Nucula) t. 125, f. 11; T. & B., p. 385; N. com- planata, Simp.							T 1 2 Jm											
galathea, d'Orb, Prod. I. p. 234; T. & B., p. 383, pl. xi., f. 5; Nucula elliptica, Rôm., Verst. Ool., p. 100; N. infexa, Quenst., Jurs, t. 13, f. 4 and t. 23, f. 15; N. cymbula, N. dura, Iso- cardia nitida, Simp., pp. 189, 190, 199; Leda Quenstedti, Tate, Irish Lias Foss., p. 19, t. 1, f. 4.			T	T Jm	Ţ		T 1 3 6	Ţ	T 1 4	T 1 4	T1 3 4				Jm	Jm P		T. & B. (pl. xi., f. 5) ; Jm. Common.
graphica, Tate, Q. J. G. S., vol. xxvi., pl. 26, f. 12; T. & B., 386, pl. xiii., t. 4; Nucula longicaudata, Simp.								T	Ţ	T	•					Jm		T. & B. (pl. xiii., f. a in Jm. May be a variety of in complanata.
Heberti, Martin, Pal. de la Côte d'Or, p. 79, t. iii., f. 1-4; T. & B., p. 383.					Ţ													
minor, Simp., (Nucula) 1855, p. 115; T. & B., p. 383, pl. xi., f. 9.				İ	Jm		T 1 6	T	T							Jm		T. & B. (pl. xi., f. 9) i Jm.
ovum, Sow., (Nucula) M. C., t. 476, f. 1; Phil., G. Y., pl. xii., f. 4; Simp., p. 188; T. & B., p. 384; Area rostrata, Y. & B., p. 231, pl. viii., f. 24; Nucula complanata, Phil., G. Y., pl. xii., f. 8.			•										T 1 2				S 7 P 1 Jm	Very abundant.
Quenstedti, Tate, v. L. galathea.										<u> </u>			Ī					1
Renevieri. Oppel, Jura, p. 95; Tate, Irish Lias Foss., p. 19, t. 1, f. 5; T. & B., p. 394, pl. xi., f. 4; L. tenuistriata, Piette, Bull. Soc. Géol. Fr., 1856, p. 206, t. x., f. 4; Terquem & Piette, Lias Inf., p. 89, t. xi., f. 8;			T I Jm	T Jm														
rostralis, Phil., v. L. æquilatera.																	٠,	
subovalis, Goldf., (Nucula) p. 155, t. 125, f. 4; T. & B., p. 382; Corbis uniformis, Phil., G. Y., pl. xib., f. 3; Simp., p. 132; L. Bronni, Andler, Neues Jahrb., 1858, p. 642; Tate, Irish Lias Fosa., t. 1, f. 1.				T Jm	T	Ţ	T			T 1 2						Jm	P	

				L	owe	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am, capricornus.	Am, margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	. RRMARKS.
(DIMYARIA)—cont. Leda—cont. tenuistriata, Piette, v. L. Renevieri. texturata, Terquem & l'iette, Lias, Inf. de l'Est de la Fr., p. 89, t. xi., f. 5-7; T. & B., p. 385, pl. xii., f. 8. v-scripta, Tate, Irish Lias Foss., p. 19, t. l. f. 5; T. & B., p. 385. Zieteni, Brauns, Unt. Jura, p. 373; T. & B., p. 383; Nucula inflata, Zieten, Verst. Würt., t. 57, f. 4 (non Sov.); N. acuminata, Goldf., t. 125, f. 7 (non Ziet.). Lucina: cardinoides, Tate, Yorksh. Lias, p. 395, pl. xvi., f. 8. limbata, Terquem & Piette, Lias Inf. do l'Est de la Fr., p. 136, t. x., f. 6, 7; T. & B., p. 395; Tellina striata, Simp., p. 206. pumila, Münster, (Venus) Goldf., p. 243, t. 150, f. 7; T. & B., p. 396. Lutraria: ambigua, Sow., v. Pholadomya. ovata, Röm., v. Pleuromya. Lysianassa: hybrida, Mont., v. Go- niomys.			Tic Tim	T J J		Ti	Tizu			T					Jm			T. & B. (pl. xii., f. 8) in Jm. May be a variety of L. Renevieri. Resembles L. taxturata. Near to L. minor.
Buckmani , Richardson (<i>Area</i>), Murch., Geol. Chelt., p. 93, t. x., f. 5 a, b; T. & B., p. 379.									Ţ	T								
clevelandicus, Tate, Yorksh. Lias, p. 381, pl. xi., f. 6.										T Jn	1							Type in Jm.
E 69512.	1	Ī	İ	i	1	1	l	1	I	I	1	ł	I	1	II.	ł	1	E

				L	owe	r.			Mic	ldle.		Up	per.					
Species.	Rhætic Beds.	Am, planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am, serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	' Bemarks.
(DIMYARIA)—cont. Macrodon—cont. hettangiensis, Terquem, (Cucullea) Pal. de Hett., t. xxi., f. 3; T. & B., p. 379; Arca Lycetti, Moore, Q. J. G. S., vol. xvii., p. 501, pl. yvj. f. 7		T 2 3 6	T 1 2 6	T														; ,
pl. xvi., f. 7. intermedius, Simp., (Cucullos), 1855, p. 114; T. & B., p. 380; C. cucullata, Portlock, Geol. Lond., p. 120; C. incrassata, feerpansa, feuspidata. Simp., p. 185; C. Grangeri, Arca numismalis, Tate, Q. J. G. S., vol. xxvi., t. xxvi., f. S.							T 1 2 5	T	T	T 1 2 4 Jm 2	T 2 4				Jm		, ; ;	Cuculta Münsteri T. & B., Part I. ?=M. Masinus, T. & B p. 154.
naviculus, Terquem & Piette, (Cucullæa), Lias Inf. de l'Est de la Fr., p. 91, t. xi., f. 16, 17; T. & B., p. 379.			T	T	T ?			,								ر	·	
Pulchellus, Tate, Yorksh. Lias, p. 381, pl. xiii., f. 1.							T	,										
pullus, Terquem, (Arca) Pal. de Hett., p. 307, t. xxi., f. 1; T. & B., p. 879.			T	T I Jm	100													
Lodiola :										ľ								
bifasciata, Tate, Yorksh. Lias, p. 879, pl. xi., f. 3.				T										į	$J_{\frac{m}{1}}$			Type in Jm.
hillana, Sow., M. C., t. 212, f. 2; T. & B., p. 377.			T Jm												S 1 P			
hillanoides, Chap. & Dew., (Mytilus) Terr. Sec. ac Lux., p. 185, t. xxv., f. 3; T. & B., p. 377; Modiola psilonoit, Quenst. Jura, t. 4, f. 18.		1	T 1 2	Ţ	;										z			
12evis, Sow., M. C., t. 8, f. 4; T. & B., p. 377.		T 6	6	T 1 2 Jm	T ?									8.				
minima, Sow., M. C., t. 210, f. 5-7; T. & B., p. 877.	T 2	T 2 3 5 6		1				,		- i					13 6	1		,
numismalis, Oppel, Mitt, Lias Schwabens, p. 83, t. iv., f. 17, Dum. Dep. Jura., vol. iii, p. 126, t. xix., f. 8, 9; T. & R., p. 378; M. pygmæus, Simp., p. 195.		-		1	î		T 3 5 6	T	T	T 2 4 1 1 1 1 1 1 1 1 1	T 1 2			An entire photographic depose		ndg)	, ()	

				L	owe	1			Mid	dle.	<u> </u>	Upj	per.		2			
		_				1	<u> </u>	rafi (<u> </u>		1.1			-			
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus	Am. margaritatus	Am. spinatus.	Am. annulatus.	Am. serpentinus	Am. communis.	Am. jureosis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont.																		
modiola—cont. ornata, Moore, pallidus, Simp., psilonoti, Quenst., v. M. hillanoides.																		,
scalprum, Sow., M. C., t. 248, f. 2; Phil., G. Y., pl. xiv., f. 2; T. & B., p. 377; M. siliqua, Y. & B., p. 222, pl. vii., f. 1; M. siliqua and curvata, Simp., p. 194.					Ţ	70 m	T	T	T Jm	T	T?				S 1 6	S 1 2 P 1		
siliqua Y. & B., and Simp., v. M. scalprum.																		,
subcancellata, Buvig., Géol. de la Meuse, p. 2f., pl. xvii., f. 17-19; T. & B., p. 378, pl. xiii., f. 2; M. paltidus, Simp., 1855 (non Sow.); M. ornata, Moore, Up. & Mid. Lias, p. 101, t. vii., f. 7 (non Goldf.); Mytilus Moorei, Dum., Dep. Jura., iii., p. 283, t. 35, f. 1.									T Jm									T. & B. (pl. xiii., f. 2) in Jm.
Thiollierei, Dum. (My- tilus), Dep. Jur., Pt. III., p. 284, t. 34, f. 5, 6; T. & B., p. 378.								T	T	T								? M. elongata K, & D.
Mya: literata, Simp., v. Gonio-								A 100 1						:			1.	,
mya hybrida. rhombifera, Quenst., v.								1000			ı							
Goniomya heteropleura.								,						ž,		ر). د اد		• • •
Myacites: concava, Simp., v. Gresslya striata.														;				
costata, Simp., v. Pleuromya.								d						} ;		,		
donaciformis, Phil. and Simp., v. Gresslya.											l			,				
dubia, Simp., v. Gresslya intermedia.								oglification of the second	1									1
elegans, Phil., v. Pleuromya.								:										
ferruginea, Simp., v. Pleuromya costata.																		
GRANDÆVUS, Phil., G. Y., p. 256.															P			1
levis, Simp., v. Gresslya Seebachii.															 			

				L	owe	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Liss.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont.																		
Myacites—cont.															ž			
liassinus, Phil., v. Pleu- romya costata.																		,
maculata, Simp., v. Gress- lya Seebachii.																	'	
mediæva, Simp., v. Gress- lya striata,																		
musculoides, Auct., v. Pleuromya crowcom- beia.															!			
rotundatus, Gresslya in- termedia. Phil., v. Gresslya ro- tundata.																		l.
rotundata, Simp., v. Gresslya abducta.																		
<i>subtriangularis</i> , Simp., v. Gresslya stri a ta.																		
subtruncata, Simp., v. Gresslya Seebachii.																		
unioides, Auct., v. Pleuromya costata.						i												
ventricosa, Simp., v. Pleu- romya ovata.																		
Myoconcha:											Į.							
decorata, Münster, (Mytilus) Goldfi, p. 174, t. 130, f. 10; T. & B., p. 393; Solen ensis, Y. & B., p. 220; Mytilus ensis, Simp., p. 194.								T 1 3		T 1 2 4								
inclusa, Terquem, (Cypricardia) Pal. de Hett., p. 305, t. xx., f. 12; (Myoconcha) Terquem & Piette, Itas Inf., p. 85; T. & B., p. 393.			T															Single specimen. May be a young form of M. psilonoti.
psilonoti, Quenst., Jura, t. 4, f. 15; T. & B., p. 893.			T 1 6	T											Jm			
Mytilus:		1						. ;										
aviothensis, Buvig., Géol. de la Meuso, p. 21, pl. xvi., f. 35-37; T. & B., p. 376.										T Jm								
curvata, Simp., v. Modiola scalprum.																		
decòrata, Goldf., v. Myo- concha.																		
ensis, Simp., v. Myoconcha decorata.																		

		_		Lo	owe				Mid	dle.		Up	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Mytilus—cont. hillanoides, Chap. & Dew., v. Modiola. hippocampus, Y. & B., and Simp., v. Hippopodium ponderosum. Moorei, Dum., v. Myoconcha subcancellata. psilonoti, Quenst., v. Inoceramus pinnæformis. pygmæus, Simp., v. Modiola numismalis. rusticus,																		
Simp., v. Hippopodium ponderosum. Simp., Thiollierei, Dum., v. Modiola. Nucula: acuminata, Goldf., v. Leda Zieteni. complanata, Goldf., v. Leda. complanata, Phil., v. Leda.							ı											
cymbula, Simp., curbula, Simp., dura, Simp., elliptica, Rom., inflata, Ziet., v. Leda	L.					T 1 6	Ţ			T		r				Ji	ma 1	
longicaudata, Simp., v. Leda graphica. minor, Simp., v. Leda. mavis, Piette, Bull. Soc. Géol. Fr., 1856, p. 206 f. x., f. 3; Terquem & Piette, Lias Inf., p. 90 f. x., f. 8-10; T. & B. p. 382. ovum, Sow., v. Leda. subovalis, Goldf., v. Leda			T	1	J													Common in the Bucklandi-zone.

				L	ōwe	r.			Mid	ldle.		Up	per.					
Sprcies.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remares.
(DIMYARIA)—cont.						ŀ												
Nucula—cont.						7,00												
tellinæformis, Simp., v. Leda æquilatera.						or seprencial real												,
varfabilis, Sow., v. Tab. II.						Mary Special	i	-	'		8							N. subglobosa, Röm. ir Survey Mem. Expl
Opis: cloacinus, Quenst., v. Isodonta Ewaldi.						der demographischer												Survey Mem. Expl 95 N.W., p. 20.
Pachyodon:						A REP. L		-									,	1
lanceolata, Stutch., v. Cardinia concinna.																		
Panopæa:																		
broliensis, Buvig., v. Arcomya longa.																		1
polea, d'Orb., v. Arcomya elongata.						:												
Pholadomya: ambigua, Sow., (Lutra- ria) M. C., t. 227; T. & B., p. 398; P., pro-							T	T	T 1 Jm	T 1 2 4	T				S 1 P	S ₁		Common in the Main Seam of ironstone.
ducta, recurva, Simp., p. 221.								1	'	Jm					1			
antiquata, Simp., v. Ph. decorata.																		
Beyrichii, Schöubach, Zeit. Deutsch. Geol. Ges., 1863, Bd. xv., p. 537, t. xiii., f. 1; T. & B., p. 398.								T										
concinna, Simp., v. Ph. ventricosa.																	,	1
decorata , Zieten, Verst., Würt., p. 87, t. 46, f. 2; T. & B., p. 398. P. anti- quata, P. elongata, P. truncata, Simp., p. 226.						T	T 1 2 4											Common.
slongata, Simp., v. Ph. decorata.								٠.										
Fraasii, Oppel, Jura, p. 95; T. & B., p. 398; P. prima, Quenst., Jura, t. 5, f. 2.	1		T 6	T														,
GALLINA, Simp.																Si	P	= Gresslya? sp. indet.
gibbosa, Simp., v. Ph. Simp s oni.				:	1													T. & B. p. vii., bis.
glabra, Ag. Myes, p. 69, t. 3 ¹ , f. 12-14; T. & B., p. 398.			T	T 1														1. 1

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				· L	owe	r.			Mic	ldlę.		Up	per					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. srmatus.	Am. Jamesoni.	Am. oapricornus.	Am. margaritatus.	Aul. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Pholadomya—cont. lævis, Simp., v. Gresslya intermedia.																		**.
lunata, Simp., 1855, p. 128; T. & B., p. 399.)		T								Type in Wm.
obliquata, Phil., v. Gresslya Seebachii.																		
prima, Quenst., v. Ph. Frassii.																		
producta, Simp., v. Ph. ambigua. Simp.,																		
rostellata, Simp., v. Gresslya lunulata. Simp.,																		
Simpsoni, Tate, Yorksh. Lias, p. 399, pl. xii.,f. 1; <i>P. gibbosa</i> , Simp., 1885, p. 128 (non Sow.).						2				Jm								
truncata, Simp., v. Ph. decorata.			:															
ventricosa, Ag., (Ho- momya) Myes, p. 158, t. 16, f. 7-9; t. 17; T. & B., p. 389; P. concinna, Simp., p. 221.				T	Ţ													Compare also Dum. Dep. Jur., pt. ii., p.45, t. xviii., f. 3, 4.
Plenromya: aequalis, Simp., (Amphidesma), 1855, p. 125; T. & B., p. 407, pl. xiv., f. 8. arcacea, Seebach, v. Ar-					- Police			No. of the Control of		,			T					Single specimen in the Whitby Museum.
comya.					i			Nacration of	ļ					v. glama, s.v.		ľ	`	r planter
bituminosa, Tate, Yorksh. Lias, p. 405, pl. xii., f. 9.					a miles of the first							Jr.		£				
contracta, Simp., (Amphidesma), 1855, p. 124; T. & B., 407, pl. xvi., f. 9.					;							2					Si	Whitby Museum.
costata, Y. & B., (Unio) p. 223, pl. viii., f. 7; T. & B., p. 404, pl. xiii., f. 9; (Myacites), Simp., p. 210; M. ferruginea, Simp., p. 214; Myacites unioides, auct.; (Vsnus) Rôm., Verst. Ool., p. 109, pl. viii., f. 6; ? M. Lias- sinus, Phil. G. Y., p. 256.					,		J ₁	T	Jm	T	T 2		S	4 4 4		S 1 3	1	This may be the <i>Pl.</i> *rostrata, T. & B., pp. 126 & 154. T. & B. (pl. xiii., f. 9) in Jm.
orassa, Ag. Myes, p. 240, t. 28, f. 4-6; T. & B., p. 404.				Jn	a '													

				E	ωw	er.			Mic	idle.		Up	per					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinstus.	Am. snnulstus.	Am. serpeutinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remark ^s ,
(Dimyaria)—cont. Pleuromya—cont. crowcombeta, Moore, (Pteromya) Q. J. G. S., vel. xvii., p. 506, pl. xv., f. 22, 23; T. & B., p. 406, pl. xiii., f. 10; Myacites musculoides, Auct.; Phil., Thames Valley, pl. vii., f. 36. Dunkeri, Terquem,		T1 2 3 6		Т											Jm 2 3 S			T. & B. (pl. xiii., t. 10) in Jm.
Punkerl, Terquem, Pal. de Hett, p. 284, pl. rviii., f. 13; T. & B., p. 405. 7 elegans, Phil., (Sanguinolaria) G. Y., 1835, pl. xii., f. 9; T. & B., p. 407; (Myacites) G. Y., 1875.				T Jm									P				P Ym	? Arcomya elegans, T. & B., p. 189.
galathea, Ag., v. Gresslya. granata, Simp., (Venus) 1855, p. 121; (Gresslya) Phil. G. Y., p. 256; T. & B., p. 405, pl. xiii., f. 7. liasina, Schübler, (Unio) Zieten, Verst. Würt, p. 81, t. 61, f. 2;			T 1	T					T I Jm								P	T. & B. (pl. xiii., f. 7) in Jw.
T. & B., p. 468. mundula, Tate, Yorksh. Lia-, p. 406, pl. xii., f. 11. ovata, Röm., (Lutra- ria) Verst. Ool., Nachtr., p. 41, t. xix., f. 27; T. & B., p. 404; Myacites ventricosa, Simp., p. 218. rotundata, Zieten,						T 1 6	T 1 2 4	Ţ	T									Type in Jm.
(Amphidesma) Verst. Wurt., p. 95, t. 72, f. 2; T. & H., p. 405.											T Jm							
Pteromya: crowcombeia, Moorc, v. Pleuromya.																		
Pullastra : antiqua, Phil., v. Cardinia Santuinoloria :					,													
elegans, Phil., v. Pleuromya. striota, Buck., v. Arcomyu elongata.																		
notusta, Phil., v. Arcomya						ĺ												

				L	owe	r.			Mide	ile.		Up	er.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Saxicava: arenicola, Terquem, Pal. de Hett., p. 287, pl. 18, f. 7; T. & B., p. 412. Schizodus:			T			T?												4 и
cloacinus, Oppel. & Suess., v. Isodonta Ewaldi. Solen: ensis, Y. & B., v. Myoconcha decorata.																		
Taniodon: Ewaldi, Bornemann, v. Isodonta. Tancredia:																		
apicistria, Rolle. Sitz. K. Akad. Wiss., vol. xlii., p. 275, f. 7; T. & B., p. 397. broliensis ?, Buvig., (Hettangia) Géol. de				July 1	n					T								
broliensis?, Buvig. (Hettangia) Géol. de la Meuse, p. 14, pl. x., f. 22-25; T. & B., p. 397; Tancredia Liassica Etheridge, Q. J. G. S. vol. xxxi., p. 127, pl. v., f. 5.																		
dionvillensis, Ter quem, (Hettangia) Bull Soc. Géol. Fr., vol. x., p 375, t. 1, f. 1-4; T. & B. p. 397, pl. xiv., f. 12. ferrea, Etheridge, v. T.												T	T	9				
ovata. liassica, Etheridge, v. T broliensis.																		
longiscata, Buvig. (Hettangia) Géol. de la Meuse, p. 15, pl. xiii. f. 19, 20; T. longicos tata, T. & B., p. 397.	. I									T Jn 2	n							One example.
 Incida, Terquem (Het tangia), Bull. Soc. Geol Fr., 1853, p. 375, t. ii. f. 8-10; T. & B., p. 397. 	- 1									T						J		
ovata, Chap. & Dew Terr. Sec. de Lux. p. 173, t. xxv., f. 2; T. & B., p. 397; T. ferrea Etheridge, Q. J. G. S. vol. xxxi., p. 127, pl. v. f. 4.				J ₁	١.													

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				Ι	юw	er.		;	Mi	ddlc.		Up	per	• 1				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynatus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(DIMYARIA)—cont. Tellina: aquilatera, K. & D., v. Leda. cycliformis, Simp., v. Venus tenuis. fabalis, Simp., 1855, p. 121; T. & B., p. 393, pl. xii., f. 5. lingonensis, Dum., Dep. Jur., 1869, vol. iii., p. 263, t. 30, f. 1; T. & B., p. 395.								THE TENENT AND MAKE THE PROPERTY AND A SECOND ASSESSMENT OF THE PROPERTY AND A SECOND ASSESSMENT OF THE PROPERTY OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE PROPERTY	Ti Jm	T 1			D	All the blooding of the second				One example.
striata, Simp., v. Lucina limbats. Thracia: glabra, Ag., (Corimya), Étud. Crit. Myes, p. 265, t. 38, f. 5–15; T. & B., p. 409. Grotianif, Brauns, Der Unt. Jura, p. 314, t. ii., f. 3, 4; T. & B., p. 409.					4 400 · · · ·			T1	Tì	T			T 1 2					·
Trigonia: lingonensis, Dum., Dep. Jpr., 1869, vol. iii., p. 275, t. xxxii., f. 6-8; Phil., G. Y., 1875, pl. xiv., f. 11; Lycett. Foss. Trig., pp. 98, 219, pl. xxii., f. 1-4; Tate, Geol. Mag., 1872, p. 306; T. & B., p. 386, pl. xi., f. 2.										T 1 2 Jm						Jm P		Probably the oldest known Trigonia. Lyc. (pl. xxii., f. 1-4) and T. & B. (pl. x1., f. 2) in Jm.
literata, Y. & B., p. 225, pl. viii., f. 2; Phil., G. Y., 1829, pl. xiv., f.11; 1875, pl. xii., f. 10; Lyc., p. 64, pl. xiv., f. 1-4; Simp., p. 192; T. & B., p. 386.													T	T			P 1 Jm	Lyc. (pl. xiv., f. 1-4) in Jm. Specimen figured by Phillips appears to be in Sm.
modesta?, Tate, Yorksb. Liss, p. 386, pl. xii., f. 4; Lycett, Foss. Trig., p. 212, pl. xii., f. 13. Unicardium:					,		Tis									.,	Jm	Dr. Lycett considered the extension of the genus Trigonia to the armatus zone as very doubtful.
cardioides, Phil., (Corbula) G. Y., pl. xiv., f. 12; Simp., p. 209; T. & B., p. 396; Corbula æquivalvis, deltoidea, Simp., p. 209; C. inæquivalvis, Simp., 1855. globosum, Moore, v. U. subglobosum.			T1 2 6	T	T		Jm								5 P	S		Type in York Museum

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,				Ľ	owe	er.			Mid	ldle.		Up	per.					
SPECIES.	Bheetic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Ain. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
(D																		
(DIMYARIA)—cont.																		
Unicardium—cont. (subglobosum, Tate, Yorksh. Lias, p. 396; <i>V.</i> globosum, Moore, Mid. & Up. Lias, p. 108, pl. vii., f. 15 (non Agassiz)								,,		T Jm	T ?	,				ø		
Unio:																		•
abductus, Phil., v. Gresslya abducta. Gresslya Seebachi.																		
costatus, Y. & B., v. Pleuromya.		ľ																
crassissimus, Sow. crassiusculus, Sow.																		
liasinus, Schüb., v. Plen- romya.																		
Listeri, Sow., v. Cardinia.		l			1	İ												
Venus: bombax, Quenst., v. Ceromya.																		
granata, Simp., v. Pleuromya.																i.		
petricosa, Simp., v. Ceromya.													İ					
pumila, Münster, v. Lu- cina.						•							ĺ					
tenuis, Koch & Dun- ker, Nord. Ool., p. 30, t. ii., f. 5 a, b, T. & B., p. 393; Tellina cyclifor- mis, Simp., 1855.														T I Jm				Abundant.
unioides. Rom., v. Pleu- romya.																		
SCAPHOPODA.																12	101	1 (A) 4124 V (1) 1 1
Bentalium : cylindricum, Röm., v. D. elongatum.																	А,	, , ,
elongatum, Münster Goldf., p. 2, t. 168, f. 5; T. & B., p. 332, pl. ix., f. 28; D. cylindricum. Röm., Verst. Ool., p. 134, (non Sow.); D. gracile, Moore, Mid. & Up. Lias, p. 86, t. v., f. 23.	1								T 1 2 S 1	T 2 3 Jm 1 2	T1 2 4			T				? = D. entaloides, Desh.
giganteum.	ſ ¹	b	1	l	I	ļ	Į.		ı	1	ı	ı	1	1	ţl	1	1	I

				I	10 W	er.			Mic	ldle.	1	Up	per	•				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Dentalium—cont.						different all-												•
etalense, Terquem & Piette, Lias Inf., p. 67, t. ii., f. 43; T. & B., p. 33, pl. ix., f. 13; D. Portlocki, Tate, Irish Lias Foss., t. 1, f. 15.			T Im	T Jm														T. & B. (pl. ix. f. 13) in Jm.
giganteum, Phil., G. Y., pl. xiv., f. 8, Simp., p. 257; T. & B., p. 351, pl. ix., f. 10; <i>D. entalis</i> , Y. & B., 1822, p. 244, pl. xi., f. 13 (non Linn.).									T :							Jm P		
gracile, Moore, v. D. elongatum.																		
liassicum, Moore, Mid. & Up. Lias, p. 86, t. v., f. 24; T. & B., p. 883.											T							Two example
limatulum, Tate, Q. J. G. S., vol. xxvi., p. 402, pl. 26, f. 1; T. & B., p. 332, pl. x., f. 18.			T	T											Jm			Type in Jm.
Portlocki, Tate, v. D. etalense.		ľ																,
GASTEROPODA. Actaeon: Sedgvici, var. pullus, L. & M., p. 119, pl. 15, f. 11; Hud., Geol. Mag., 1885, p. 253, pl. v., f. 5; Tornatella pulla, Koch & Dunker, Verst. Ool., p. 38, pl. ii., f. 11; Actæonina pulla, T. & B., p. 356. sinemuriensis, Martin, v. Actæonina.														T				See also A. Sedgvici, Tab. II.
tessellatus, Tate, v. Actæo- nina ilminsterensis.																		
Actæonina: chrysalis, Tate, Yorksh. Lias, p. 356, pl. x., f. 23.										T Jm		,						Closely related to A. humeralis. Type in Jm.
fragilis, Dunker, (Tornatella) Pal., vol. 1, p. 111, t. xiii., t. 9; T. & B., p. 354.		T	T	T I Jm	T Jm					2								24. 150
ilminsterensis, Moore, Up. & Mid. Lias, p. 82, t. v f. 25, 26; T. & B., p. 355, pl. ix., f.7; Actaon tessellatus, Tate, Geol. Mag., 1871, p. 9.								T	T	Ti 3 4	T					Jm		T. & B. (pl. ix., f. 7) in Jm. Actaonina tessellath, T. & B., Pt. 1., p. 172.

				L	owe	er.			Mid	dle.		Up	per.					· · · · · · · · · · · · · · · · · · ·
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Acteonina—cont. marginata, Simp., (Auricula?), 1855, p. 134, T. & B., p. 355; Acteom, sp. Phil., G. Y., t. xii., f. 11; Tornatella capri- corni, Tate, Q. J. G. S., vol. xxvi., p. 405, t. xxvi., f. 18. pulla, T. & B., v. Acteon Sedgvici. cinempriensis, Martin, (Acteom) Pal. de Cote d'Or, p. 70, t. 1, f. 9, 10; T. & B., p. 355. Amberleya v. Eucyclus. Ampullaria: buccinoides, Y. & B., v. Natica. Auricula: marginata, Simp., v. Acteonins. Cerithium: acriculum, Tate,				T		T1	Ti	T			7	7		7				Type in Jm,
Yorksh. Lias, p. 351, pl. x. f. 1. armatum, Goldf., p. 31, t. 173; T. & B., p. 351. Collenoti, Terquem, v. Chemnitzia. Defossum, Phil., G. Y., p. 258. gratum, Terquem, Pal. de Hett., p. 277, t. 17, f. 6; T. & B., p. 350. Hassicum, Moore, Mid. & Up. Lias, p. 8, pl. 4, f. 16, 17; T. & B., p. 351, pl. ix., f. 18. quadrilineatum, Röm., (Turritella) Verst. Ool., p. 154, t. xi., f. 14; Brauns, Mit. Jura, t. ii., f. 7, 8; T. & B., p. 351; Hud. Jura. Gast., p. 145, pl. viii., f. 1. regularis, Terquem, v. Turritella. semele, d'Orb., Prod. I., p. 215; Martin, Pal. de la Côte d'Or, t. xi., f. 8-10; T. & B., p. 350.			TI	T						Jm 1 T 1 Z Jm 2	Tat		T	T		P		Single specimen. Two examples. Turritella Dunkeri. T. & B. (pl. ix., f. 18) in Jm.

				L	owe	r.			Mid	dle.		Upj	er.					- Jang
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatuš.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Cerithium—cont. Slatteri, Tate, Q. J. G. S., vol. xxvi., p. 406, pl. 26, f. 7; T. & B., p. 351; Rostellaria? sp. Phil., G. Y., pl. xii, f. 12; Turbo aureus?, Simp., p. 155.						T I Jm	T 1 3	21. worthingstriffschause.	*									Common.
spiratum, Moore, Q. J. G. S., vol. xxiii., p. 543, pl. xiv., f. 12; T. & B., p. 350. sublineatum, Moore, v. Chemuitzia semitecta. transversa, Blake, v. Chemnitzia.			Ţ					Line - Million in John Life Life Life Life Chillis										
Chemnitzia: acula, Tate, Yorksh. Lias, p. 354, pl. x., f. 10. Berthaudi, Dum., Dep. Jur., vol. ii., p. 184, pl. 44, f. 2; T. & B., p. 352; Cl. Tylori, Tate, Q. J. G. S.,				T		Jm		principle opposition of the second			T 1 4 Jm							Ch. acicula, T. & B Part 1, p. 172, Ch acuta, p. 221, Type in Jm.
vol. xx, p. 313. Blain villei , Münster, (<i>Melania</i>) Goldf., p. 112, pl. 98, f. 9; T. & B., p. 353.							T 1 2	T	T	T	T 2							7.1
carusensis, d'Orb., Prod. I., p. 226; T. J., p. 34, pl. 237, f. 13-15; T. & B., p. 353. citharella, Tate, Yorksh. Lias, p. 354, pl. x., f. 4; Turbo ferreus, Simp., p. 156.						T	T	Ţ	T Jm			,				1	-	Type in Jm.
Collenoti, Terquem & Piette, (Cerithium) Lias inf., p. 63, pl. vi., f. 1, 2; T. & B., p. 351. foveolata. Tate. Yorksh.				Ţ	T		Tr.							, i				136A y
Liss, p. 353, pl. ix., f. 12. nuda, Münster, (Turri- tella) Goldf., p. 106, pl. 196, f. 13; T. & B., p. 354, pl. x., f. 9.							3		T	Ţ						Jņ	1 1	T. & B. (pl. x., f. 9) i
semitecta, Tate, Yorksh. Lias, p. 353, pl. ix, f. 23; Cerithium sublineatum, Moore, Mid. & Up. Lias, p. 84, pl. iv. f. 11 (non Chem. sublineata, d'Orh).									T Jm 1	T						-		

					Ļ	owe	r.			Mid	ldle.	 	Upp	per.		1.			
Species.		Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am, Bucklandi.	Am, oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am, serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Liss.	Upper Lias.	Remarks.
Chemnitzia—cont. transversa. (Cerithium) Q. ivol. xxviii., p. 14 B., p. 352, pl. x., Tylori, Tate, v. C thaudi. undulata, Benz ritella) Zieten, Würt., pl. 32, f. B., p. 353. unicingulata, quem, (Melania) Hett., p. 256, pl. T. & B., p. 352. Youngi, Simp, laria?), 1855, p. & B., p. 352, pl. x (Turbo) Sinp,, 156. Cryptænia: consobrina Yorksh. Lias, p. x., f. 22, a, b. expansa, Sow. cina) M. C., t. 2 3; T. & B., p. 334 cirroidea, Y. & 248, pl. xi., f. 4; cirroides, Simp.	f. 21. h. Ber- (Tur- Verst. 2; T. & Ter- Pal. de 14, f. 10; (Sca- 104; T. vi., f. 6; 1884, p.		Am,	те те	'dty	Ащ,	T			T1	T ₂ J ₂ T ₁ 2		, Am,	Am,	Am.	Low	K ₁ P ₁	Upp	Geological position said to be unknown. Compare T. & B., pp. 87 and 353. Type in Wm.
	rquem,) Pal. f. 5; T. pun-maria) t. xiii., 335. s, Sow., t. 273, x, t. 273,			T 6 T 1 6	T?					T 1 Jm 1 T 1 Jm			ī			<i>1</i> 0 1			Near to Cr. expansa. Type in Jm.

		Π		L	owe	r.		٠.	Mic	ldle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am capricornus.	Am. margaritatus.	Am. spinstus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Discohelix—cont. Hasinus, Dunker, (Planorbis) Pal., vol. i., p. 107, t. xiil., f. 20; T. & B., p. 340.		Т 8																Euomphalus, T. & B., Part I.
Oppeli , Martin, (Stra- parolus) Pal. de la Côte d'Or, p. 74, t. 1, f. 39-43; T. & B., p. 340, pl. x., f. 8, a, b.				Ţ Jm														T. & B. (pl. 1., f. 8) in Jm.
semiclausus, Tate, Yorksh. Lias, p. 341, pl. ix., f. 14, a.			T I Jm															Type in Jm.
striatus, Piette, (Solarium), Bull. Soc. Géol. Fr., vol. xiii., p. 205, t. x., f. 10; T. & B., p. 340, pl. ix., f. 8, 9; S. depressum, Terquem & Piette, Lias Inf., t. ii., f. 35-38.			T	T 1 Jm														T. & B. (pl. ix., f. 8) in Jm.
Eucyclus: Amberleya. acuminatus, Chap. & Dew.(Trochus) Foss. de Lux., p. 82, t. xii., f. 3; T. & B., p. 346, pl. x., f. 20.			T Jm	Jm														T. & B. (pl. a., f. 20) in Jm.
Chapuisi, Terquem & Piette, (<i>Trochus</i>) Lias. Inf., p. 43, t. ii., f. 25-27; T. & B., p. 346, pl. ix., f. 29.				T														
cingendus, Tate, Yorksh. Lias, p. 346, pl. x., f. 15.								T	T Im	T	T					Jm		Type in Jm.
conspersus, Tate, Yorksh. Lias, p. 347, pl. x., f. 11, a, b.									1	Ţ Jm								Type in Jm.
elegans, Münster, (<i>Turbo</i>) Goldf., p. 94, t. 193, f. 10; T. & B., p. 346, pl. ix., f. 30.			T 6 Jm	T I Jm						2								
gandryanus, d'Orb., (Trochus) T. J., p. 268, pl. 811, f. 4-7; T. & B., p. 347.							T											
imbricatus, Sow., (Trochus), M. C., t. 272, f. 5, 6; T. & B., p. 346; Turbo concinnus, Simp., p. 153.						T 1		201										
nireus, d'Orb., (<i>Turbo</i>) T. J., p. 333, t. 327, f. 11- 18; T. & B., p. 347.										T								
selectus, Chap. & Dew., (Turbo) Foss. de Lux., p. 89, t. xil., f. 7; T. & B., p. 346.				T I Jm														

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Eucyclus—cont. undulatus, Phil., (Turbo) G. Y., pl. xiii., f. 18: Simp., p. 153; T. & B., p. 347, pl. x., f. 12; T. subundulatus, d'Orb., Prod. I., p. 228; T. adductus, T. rugosus, Simp., p. 153; (Pleuro-								T	T	T						P 1 Jm		Type in Ym, T. & B (pl. x., f. 12) in Jm.
tomaria), Phil., 1875. Euomphalus: minutus, Schüb., Zieten, Verst. Würt., p. 46, t. 33, f. 6; Brauns, Mitt. Jura, p. 183, pl. ii., f. 11-13; T. & B., p. 341; (Straparolus) d'Orb., Prod. I., p. 248; Natica neglecta, Simp., p. 159; ? Natica pilula, Tate, Geol. Mag., 1871, p. 8.												T 1 3						(Discohelix) T. & B
Helicina: expansa, Sow. solarioides, Sow.																		
Helix: cirroidea, Y. & B., v. Cryptænia expansa.																		
Hydrobia: solidula, Dunker, (<i>Paludina</i>) Pal. I., p. 108, pl. xiii., f. 9; T. & B., p. 345, pl. ix., f. 6; <i>Turbo</i> exemptus, Simp., 1855.					Jr	- 1	3											T. & B. (pl. ix., f. 6) i
Littorina: clevelandica, Tate, Yorksh. Lias, p. 348, pl. x., f. 17.									T 1 Jm									Type in Jm.
semiornata?, Münst., (<i>Turbo</i>) Goldf., p. 94, t. 193, f. 8; T. & B., p. 348.			T						î									Casts.
Melania: Blainvillei, Münster, v. Chemnitzia.																		
Zenkeni, Dunker, v. Turri- tella.																		
Natica: buccinoides, Y. & B., (Ampullaria) 1828, p. 249; T. & B., p. 349 pl. ix., f. 11; Turbo buccinoides, Simp., p. 158; Natica pelops, d'Orb., Prod. I., p. 247; T. J., pl. 288, f. 16, 17.												T					P Jn	

				L	owe	r.			Mid	dle.		Մթյ	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Natica—cont. neglectus, Simp., v. Euomphalus minutus. pelops, d'Orb., v. Natica buccinoides. pilula, Simp., v. Euomphalus minutus. purpuroidea, Tate, Yorksh. Lias, p. 349, pl. x., f. 13. Nerita: alternaus, Tate, Yorksh. Lias, p. 333, pl. x., f. 16, a, b, c. Paludina: solidula, Dunker, v. Hydrobia. Planorbis: liasinus, Dunker, v. Discohelix. Phasianella: morencyana, Piette, Bull. See, Géel. Fr., t. xiii., p. 204, pl. x., f. 12; Terquem & Fierte, Lias Inf., t. iv.,		The same of the sa	T 1 6	1						T ₂ Jm ₂							103	Type in Jm,
f. 9-11; T. & B., p. 342; pl. ix., f. 21. Pitonillus: sordidus, Tate, Yorksh. Lias, p. 343, pl. x., f. 19. Pleurotomaria: anglica, Sow., (Trochus) M. C., t. 142; Hud., Geol. Mag., 1885, p. 154, pl. iv., f. 5; Pl. simits. T. & B., p. 337, pl. ix., f. 4. basilica, Chap. & Dew. Terr. Sec. de Lux., p. 94, t. xiii., f. 2; T. & B., p. 387 coneava, Martin, Pal. de la Côte d'Or, p. 74, t. ii., f. 1, 2; T. & B., p. 339, pl. ix., f. 27. foveolata, Desl., Mém. Soc. Liun. Norm., vol. viii., p. 71; T. & B., p. 388, pl. ix., f. 2; P. foveolata, var. trochoidea, Desl., loc. cit., t. xv., f. 2; P. suc-faveolata, (Orb., Proc.)	And the second s	TI S	71	Jr		, and the second		T							P1 5	1		Type in Jm. (Trochus similus, Sow., M. C., vol. 2, p. 95, but altered to T. angivers in the corrigends, p. 238. T. similus, Sow., M.C., t. 181, f. 2 is another species. T. & B. (pl. ix., f. 4) in Jm. T. & B. (pl. ix., f. 27) in Jm.

				Lo	wei	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am, spinatus.	Am. annulatus	Am. serpentinus.	Ain. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Pleurotomaria—cont.			1				1							*				
foveolata, var. pin- guis, Desl., Mém. Soc. Linn. Norm., vol. viii., p. 75, t. xv., f. 6; <i>P.</i> procera, T. & B., p. 338, pl. ix, f. 24; <i>Trochus</i> pusilus, Simp., p. 145.						T					1. "	And a second sec	and companion recompanion as as as pro-	HARLEST STREET, CONTRACTOR STREET, CO.	:			
helicinoides, Röm., (Turbo) Verst., Ool., p. 150, t. xi., f. 13; (Pleu rot om ar i a) Brauns, Unt. Jura, p. 278; T. & B., p. 38s, pl. x., f. 7; Turbo canalis, Minster, Gold., t. 193, f. 12; Trochus carinatus, Moore, Mid. & Up. Lias, p. 91, pl. iv., f. 24, 25.								And a feet		T 1 2 Jm 2								T. & B. (pl. ix., f. 24) in Jm.
Hennocqui, Terquem, Pal. de Hett., p. 275, t. xvi., f. 12; T. & B., p. 337.				T ?														Single specimen.
jamoignaca, Terquem, v. Cryptænia solarioides.													ļ					
obesula, Tate, Yorksh. Lias, p. 336, pl. x., f. 6; Trochotoma striatum, Blake, Q. J. G. S., vol. xviii., p. 141; ? T. striatum, Stoliczka, Sitz. K. Akad. der Wiss., vol. xliii., p. 193, t. v. f. 2 (non Pl. striata, Sow.).			T Jn							(,		1	,	The second distribution of the second distributi				t t A ne'
procera, T. & B., v. Pl. foveolata, var. pinguis.									Destination 2					42.46 MT286	1			1 10 1/2 4
rotellæformis, Dunker, v. Cryptænia.														1				, , ,
rustica, Desl., Mem. Soc. Linn. Norm., vol. viii., p. 76, t. 12, f. 1; T. & B., p. 339.				Jm	.?		ŀ			T						1		· % *
similis, T. & B., v. Pl. anglica.					1.									3		y - 1,	1	
subfaveolata, d'Orb., v. Pl. foveolata.				:	A Party Service			2000									٠	
tectaria, Tate, Irish Lias Foss., p. 17; T. & B., p. 338, pl. ix., f. 26.	16.5		T	T 1 Jm	1			27			l							Type in Jm.
undosa, Desl., Mém. Soc. Linn., Norm., vol. vii., p. 77, t. 12, f. 2; T. & B., p. 339, pl. ix., f. 1.	The state of the s			1						T				ı				Single specimen.
undulata, Phil., v. Eucyclus.																		
Wehenkeli, Terquem, v. Cryptænia solarioides.					}													

				L	owe	r.		į	Mic	ld1e.		Up	per.					
SPECIES.	Rbætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Rissoa: nana, Martin, (Turbo) Bull. Soc. Géol., Fr. 1860, p. 72, t. i., f. 26, 27; T. & B., p. 345, pl. ix., f. 17. Scalaria: Youngi, Simp., v. Chemnitzia.				T Jn	1													
Solarium: depressum, Terquem, striatum, Piette, Solarium: Discohelix striatus.																		
Thomsoni, Tate, v. Turbo Philemon.														1				
Straparolus, v. Discohellx. minutus, d'Orb., v. Euom- phalus.	'																	
Tornatella: capricorni, Tate, v. Acteonina marginata. fragilis, Dunker, v. Acteonina.																		
pulla, K. & D., v. Actæon Sedgvici.		١													i I	İ		
Trochotoma: striatum. Stoliczka, v. Plewrotomaria obesula.																		,
Trochus: aciculus, Stoliczka v. Turbo.																		
acuminatus, Chap. & Dew v. Eucyclus.	.,																	
anglicus, Sow., v. Pleuro- tomaria.																		
carinatus, Moore, v. Pleurotomaria helici- noides.																		
Chapuisi, Terquem,											l							
gaudryanus, v. Eucy- d'Orb., clus.																		
imbricatus, Sow.,																		
latilabrus, Stoliczka, v. Turbo.										1								

				L	10 W (er.			Mi	ddle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatis.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. amulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lius.	Remarks.
Trochus—cont. pusillus, Simp., v. Pleurotomaria procera. redcarensis, Tate, Yorksh. Lias, p. 342, pl. x., f. 14. robigus, Tate, Yorksh. Lias, p. 341, pl. x., f. 3, a, b. similus, Sow., v. Pleurotomaria anglica. thetis, Münster, Goldf., p. 34, t. 179, f. 10; T. & B., p. 342.		•		T 1 Jm	T I J I		T1 :											Type in Jm. Type in Jm.
Turbo: aciculus, Stoliczka, (Trochus) Sitz. K. Akad. Wiss., 1861, Bd. xliii., p. 173, t. ii., f. 8; T. & B., p. 344, pl. ix., f. 22. adductus, Simp., v. Eucyclus undulatus. aureus, Simp., v. Cerithium Slatteri.							2 4			$\mathbf{T}_{\frac{2}{2}}$ $\mathbf{J}_{\mathbf{m}}$	T? 2							T. & B. (pl. ix., f, 22) in J m,
buccinoides, Simp., v. Natica. Burtoni, Tate, v. T. solarium. canalis, Münster, v. Pl. helicinoides. cirroides, Simp., v. Cryptænia expansa. concinna, Simp., v. Eucyclus imbricatus. cyclostoma, Benz, Zieten, Verst. Würt., t. 33, f. 4; T. & B., p. 344, pl. ix., f. 19, 20. defossus, Simp., v. Turritella Dunkeri. elegans, Münster, v. Eucyclus. exemptus, Simp., v. Hydrobia solidula. ferreus, Simp., v. Chem-									T 1 Jm	T 1 2	T?							T. & B. (pl. ix , f. 19) in Jm.
nitzia citharella. helicinoides, Röm., v. Pleurotomaria.		{																

Brown and	i													_	_			1
		_	_	L	owe	r.			Mid	dle.		Up	er.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Aw. communis.	Am, jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Turbo-cont. latilabrus, Stoliczka, (Trochus) Sitz. K. Akad. Wiss., 1861, Bd. xliii., p. 173, t. ii., f. 9; T. & B., p. 343, pl. ix., f. 15.										T ₂ J _m								T. & B. (pl. ix., f. 15) in Jm.
lineatus, Moore, Mid. & Up. Lias, p. 95, t. vi., f. 13, 14; T. & B., p. 843, pl. ix., f. 20.	le se									T 2 Jm 1					a.			T. & B. (pl. ix., f. 20) in Jm.
nana, Martin, v. Rissoa. nireus, d'Orb., v. Eucyclus.																		
Philemon, d'Orb., Prod. 1., p. 214; T. J., p. 327, t. 326, f. 2, 3; T. & B., p. 344, pl. ix., f. 25; Solarium Thom- soni, Tate, Irish Lias Fess., p. 16, pl. i., f. 9.			T	Jm		,												T. & B. (pl. ix., f. 25) in Jm.
reticulatus, Moore, Q. J. G. S., vol. xxiii., p. 556, pl. xvi., f, 11, 12; T. & B., p. 344.				T Jm														,
rugosus, Simp., v. Eucy- clus undulatus.																		t
selectus, Chap. & Dew., v. Eucyclus. semiornatus, Münster, v. Littorina.																		
solarium, Piette, Bull. Soc. Géol. Fr., t. xiii., p. 205, t. x., f. 16; Terquem & Piette, Lias Iuf., t. iii., f. 22-24; T. & B., p. 343, pl. ix., f. 16; Turbo tiro, Dum. Dep. Jura, vol. ii., p. 191, t. 45, f. 7, 8; Turbo Burtoni. Tate, Q. J. G. S., vol. xxiil., p. 314.			T 1 6	T I Jm														T. & B. (pl. ix., f. 16) in Jm.
subundulatus, d'Orb., v. Eucyclus undulatus.																		
tenuis, Terquem & Piette, Lias Inf., p. 52, t. iv., f. 1-3; T. & B., p. 345.		T 3 Jm																Abundant.
tiro, Dum., v. T. solarium.																		
undulatus, Phil., v. Eucy- clus.																		
Wilsoni, Tate, Yorksh. Lias, p. 344, pl. x., f. 5.				T Jm														Type in Jm.
Youngi, Simp., v. Chem- nitzia.			!	1														

				L	owe	r.			Mid	ldle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxyno;us.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Turritella: deshayesea, Terq., Mém. Soc. Géol. Fr., ser. 2, vol. v., p. 253, pl. xiv., f. 7. Dunkeri, Terquem, Pal. de Hett., p. 252, pl. xiv., f. 5. and xvi.			T	Jm T	T		Jm											? Cerithium defossum in Phil, G.Y. from the Middle Lias.
Pal. de Hett., p. 252, pl. xiv., f. 5, and xvi., f. 16; T. & B., p. 350, pl. ix., f. 3; f. T. defossus. Simp., p. 155. nuda, Münster, v. Chemnitzia.																		
quadrilineata, Röm., v. Cerithium. regularis 7, Terquem & Piette (Cerithium), Inf. Lins, p. 65, t. vi., f. 12, 13; T. & B., p. 350.				T	T Jm													
undulata, Benz, v. Chemnitzia.																		
Zenkeni, Dunker, (Melania), Pal., vol. i., p. 108, t. xiii., f. 1-3; T. & B., p. 349.			ļ	T											Jn			
CEPHALOPODA. Ammonites: allensis, Ziet., Verst. Würt., p. 37, pl. xxviii., f. 3; d'Orb., T. J., p. 238. pl. 687; (Harpoceras) T. & B., p. 303; Wr., Lias Am., p. 468, pl. lxxv, f. 8-10; lxxv., f. 1-3; lxxxii., f. 1-4; (Grammoceras) Buckman, Inf. Ool. Am. p. 192, pl. xxxi., f. 15, 16; pl. xxxii., f. 1-10; Am. sigmifer. Phil. G. Y., pl. xiii., f. 4; Am. rugatulus, ovatulus?, Simp., pp. 108, 112; Am. Moorei, Lyc., Cottes- wold Hills, Handb., p. 122, pl. 1, f. 2; (Dumor-												T			THE CALL A SHAPE WAY A SHAPE W		Pro-	Also in lnf. Ool. (T. & B., pp. 19, 20, 303).
tieria) Buckman, Inf. Ool. Am. p. 255, pl. xxx., f. 15-17, 19; pl. xliv., f. 4-9. accipitris, Buckman, Geol. Chelt., t. 11, f. 6. aculeatus, Simp., Mon. Am., p. 27; (Ægoceras) T. & B., p. 278, pl. vii., f. 4: Am. decussatus, retusus, mutatus f. Mar- shallani, Simp., pp. 94- 96. acuticarinatus, Simp., v. Am. semicostatus.						T	Jm		The state of the s								- ,	Allied to Am. armatus
a cutico status, Wright (<i>Ægoceras</i>), p. 371, pl. xxxv., f. 1-3, 7.							W	r										? = Am. sagittarius. Type in Leck. Coll.

				L	owe	er.			Mid	dle.		Up	per.					
SPECIES.	Rbætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. acutus, Sow., v. Am. margaritatus. æqualis, Simp., v. Am. angulatns. algovianus, Oppel, v. Am. nitescens. alternatus, Simp., v. Am. serpentinus. ambiguus, Simp., v. Am. Loscombi. Andersoni, Simp., v. Am. Desplacei. Andreæ, {Am. crassus. Simp., v. Am. fibulatus. anguinus, Rein., v. Am. anguinus, Rein., v. Am. Petref., p. 70; Quenst., Jura, t. S. f. l. 2; (Ægoceras) T. & B., p. 271; Wr., Lias Am., p. 318, pl. xiv., i. 5, 6; pl. xvii f. 1-6; Am. redcarensis, Y. & B., p. 258; Am. æqualis, Simp., p. 80; Am. anguliferus, Phil., G. Y., pl. xiii., f. 19.				Jmi											25-1			Am. anguliferus, Phil. is stated to be from the M.L. of Staithes.
angulatus, Sow., v. Am. communis. Am. anguliferus, latus. Phil., v. Am. defossus. annulatus, Sow., M. C., t. 222, 1.5; Y. & B., pl. xi., f. 11; (Stephanoceras), T. & B., p. 299; Wr. Lias Am., p. 475, pl. lxxxiv., f. 7-9; Am. anguinus, Rein, (Nantilus), Naut. et Arg., f. 73, 1818; Oppel, Jura., p. 254; Am. attenuatus, verms, Simp., pp. 82, 85. annuliferus, Simp., v. Am. crassus. antiquatus, Simp., v. Am. (Charmassei. antiquatus, Wright, (Harpoceras) Lias Am., p. 431, pl. lvii., f. 1-4. arcigerens, Phil., v. Am. capricornus,							Wr				T						Jm S 7	Nearly allied to Am. Normanianus, d'Orb.

											_				11	Ţ		
				L	owe	r.	_		Mic	idle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. exynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. arctus, Simp., v. Am. Loscombi. armatus, Sow., M. C., t. 95; Y. & B., pl. xiv., f. 2; (Egocsras), T. & B., p. 277; Wr., Lias Am., p. 340, pl. xxixii., f. 1-6; pl. xxix; Am. hastatus, Y. & B., pl. xiv., f. 3; Am. miles, spicatus, subtriangularis, armi- ger, Hamitloni, owen- ensis, tubellus, (pars), Simp. pp. 27-100						T1 6									S			Am. armatus, Y. & B., 1828 is given by T. & B. as a syn. of Am. validus. Am. armatus, Y. & B., 1822 = Am. fibulatus. Wright (pl. xxviii., f. 1-4) in Leck. Coll.
Simp., pp. 97-100. armiger, Simp., v. Am. armatus. athleticus, Simp., v. Am. communis. attenuatus, Simp., v. Am. annulatus. aureolus, Simp., v. Am. tardecrescens.				•							-							
aureus, Simp., v. Am. brevispina. balteatus, Phil., v. Am. cornucopia. Beanti, Simp., v. Am. variabilis.																		
Beche1, Sow., M. C., t. 280; (<i>Ægoceras</i>) T. & B., p. 281; Wr., Lias Am. p. 380, pl. xli., f. 1-5; Simp., p. 104. Belcheri, Simp., v. Am. Johnstoni. bifrons, Brug., Ency., Meth., p. 40; d'Orh.							TP	WI S				Si	T			Si 1 Jm	Jm	Much resembles Am. striatus.
bifrons, Brug., Ency. Meth., p. 40; d'Orb., T. J., p. 56, pl. 56; (Har- poceras) T. & B., p. 307; Wr., Lias Am., p. 436, pl. lix., f. 1-4; Am. Walcottii, Sow., M. C., t. 106; Am. Hildensis, Y. & B., pl. xii., f. 1; Simp., p. 140. bipunctatus, Röm., v. Am.						-							87					
valdani. Birchii, Sow., M. C., t. 267; (£goceras) T. & B., p. 274; Wr., Lias Am., p. 382, pl. xxiii.; pl. xxxii., f. 5-8; Simp., p. 102; ? Am. bispicatus, Simp., p. 102.				T		And the second s									J _m			
Birdi, Simp., v. Am. spinatus.	1	1			-	3								l		1		

				L	owe	ь.			Mid	ldle.		Up	per.		,			
SPECIES.	Rhætic Beds.	Am. planorbis.=	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Ammonites—cont. bispicatus, Simp., v. Am. Birchii.		·																
bisulcatus, Brug., Ency. Meth. i., p. 39; d'Orb, T. J., p. 43, pl. 43; (Arietites) T. & B., p. 283; Wr., Lias Am., p. 275, pl. iii., iv.; Am. multicostatus, Sow., M. C.; t. 454; Quenst. Jura, t. 7, f. 2; T. & B., p. 284; Am. validanfrac- tus, Simp., p. 135.				T														
Bodleyi, Buck., v. Am. semicostatus.															i			
boucaultianus, d'Orb, v. Am. Charmassei.												-						
boulbiensis, Y. & B., v. Am. subconcavus.																		
braunianus, d'Orb, T. J., pl. 104, f. 3; (Ste- phanoceras) T. & B., p. 300; Wr., Lias Am., p. 480, pl. lxxvi., f. 3, 4; lxxvii., f. 5, 6.					1								T					Jurensis-zone in the south,
brevispina, Sow., M. C., t. 556, f. 1 (non 2); (<i>Egoceras</i>) T. & B., p. 280; Wr., Liss Am., p. 361, pl. xxxii., f. 2, 3, 4; pl. l., f. 13, 14; Simp., p. 103; <i>Am. aureus, temui-</i> spina? Simp., p. 69.							T 1 2 Jm 1								S			
brevispina, d'Orb., v. Am. Heberti.	ı									-								
Brooki, Sow., M. C., t. 190; (Arietites) T. & B., p. 284; Wr., Lias Am., p. 280, pl. vi., f. 4, 5; Simp., p. 138.				T											S S			Very similar to Am Turneri.
Buckii, Simp., v. Am. oxynotus.																		
Bucklandi, Sow., M. C., t. 180; (non Simp.) (Arietites) T. & B., p. 283, pl. v., f. 2; Wr., Lias Am., p. 269, pl. 1, 1-3.				T m											81			Am. Bucklandi of the Whitby dealers is the Am. stellaris, Sow. T. & B. (pl. v., f. 2) in Jm.
Bucklandi, Am. Turneri. Simp. v. Am. stellaris.	Į																	 •
cæcilia, Rein., Nant. et Arg., f. 76, 77; (Har- poceras) T. & B., p. 305, pl. ii., f. 6; Am. elsgans, (pars), ovatulus, Simp., p. 106, 112; Am. ovatus f., Phil., G. Y., pl. xiii., f. 10.		,									,	r 7						Wright makes T. & P. species a syn. of Amovatus.

				L	ÓW	er.			Mid	dle.		Upp	er.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower-Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. capricornus, Sohloth., Petref., p. 71; (Ægo- ceras), T. & B., p. 281; Wr., Lias Am., p. 368, pl. xxiv., f. 1-8; Am. maculatus, Y. & B., pl. xiv., f. 9; Phil, G. Y., pl. xiii., f. 11; Am. arci- gerens, Phil, G. Y., pl. xiii., f. 9; Am. furi-								T 1 2 K 6	W ₁ r						S	S Jm		Adult form resembles Am. latæcosta. Wright (pl. xxiv., f. 1-8) in Leck. Coll.
pl. xiii., f. 9; Am. luridus, figulinus, Simp., p. 76, 78. caprotinus, d'Orb., T. J., pl. 64, f. 1, 2; (Arietites), T. & B., p. 286.					T	cacogodies organis-												Closely allied to Am tardecrescens.
carusensis, d'Orb., T. J., p. 284, pl. 64, f. 3–6 (non Wright).					S													Am. subplanicosta, Survey Mem. 95 N.W. p. 5.
$csreus$, Simp.,v. $\left\{egin{align*} \mathbf{Am.gaga} \\ \mathbf{teus.} \\ \mathbf{Am.obso} \\ \mathbf{letus.} \\ \end{array} ight.$																		
Charmassel, d'Orb., T. J., pl. 91, 92, f. 1, 2; (Ægoceras) T. & B., p. 272; Wr., Lias Am., p. 323, pl. xx., f. 1-3; Am. sulcatus, Am. anti- quatus, Am. crenularis, Simp., pp. 64, 80, 142; Am. boucaultianus, Am. Leigneletii, d'Orb., T. J., pl. 90, 92, f. 3-4.				Ti Si	i										Jr	n		
clevelandicus, Y. & B., v. Am. margaritatus.							k 1							1				
Collenoti, d'Orb., T. J., pl. 95, f. 6-9; (Arietites). T. & B., p. 280; Wr., Lias Am., p. 304, pl. vi., f. 1; pl. xxii A., f. 6-9; pl. xxii E., f. 1-3; Am. denotatus, tenellus, Simp., p. 111, 137.					7		*** ***********************************		ŀ	1								Very like Am. impendens. Wright (pl. xxila f. 6-9, and pl. xxila f. 1-3) in Leck. Coll.
comensis, Von Buch., Petrif. remark., pl. ii., f. 1-3; Dum., Dep. Jura, pt. iv., pl. xx., f. 1-3; (Harpoceras) T. & B., p. 309; Am. fabalis, pinguis, Simp., p. 113, 141.														71				Dr. Wright gives the sp. as a syn. of An striatulus.
communis, Sow., M.C., t. 107, f. 3: Y. & B., pl. xii., f. 3; (Stephanoceras) T. & B., p. 299; Wr., Lias Am., p. 473, pl. lxxxii., f. 3, 4; lxxiv., f. 1-3; lxxxii., f. 9, 10; Am. angulatus, Sow., M. C., t. 107, f. 1: Am athleticus, ? Simp., p. 82									,				7				Jr	n

				I	owo	er.			Mic	ldle.		Ur	per					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
compactilis, Simp., 1855, p. 75; (Harpoceras) T. & B., p. 308, pl. viii., f. 6; (Pseudo-lioceras) Buckm. Inf. Ool. Am., p. 85. pl. xx., f. 3-6; ?, Am. depressus, Ziet. Verst. Wurt., pl. v., f. 5. complanatus, Simp., v. Am. Oppeli. complanatus, Simp., v. Am. ferrugineus. concavus, Sow., and T. & B., v. Am. elegans. concavus, d'Orb., v. Am. lythensis. conjunctivus, Simp., v. Am. ferrugineus. convolutus, Simp., v. Am. planicosta. Conybeari, Sow., M.C., t. 131; (Arietites) T. & B., p. 284, pl. vi., f. 1; Wr., Lias Am., p. 272, pl. ii., f. 1-3. Conybeari, Simp., v. Am. spiratissimus. cornucopia, Y. & B., pl. xii., f. 1-3; Am. nit. dus?, Y. & B., p. 256; Am. batteatus, Phil., G. Y., pl. xii., f. 17; Am. fimbriatus, fasciatus, Simp., pp. 68, 70. cornucopia, Simp., v. Am. Taylori. costatus, Quenst., v. Am. spinatus. Coynarti, d'Orb., v. Am. gagateus. Crassescens, Simp., v. Am. gagateus. crassifactus, Simp., v. Am. crassus. crassifactus, Simp., v. Am. crassus.			- 1	T i Wr i fm							T 6	T1 S1	T	T	Jm 1 S 1			T. & B. (pl. vi., f. 1) is Jin.

				L	owe	er.			Mid	ldle.		Upp	per.					
Sprcies.	Rhætic Beds.	Am. planorhis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont.																		
crassiusculosus, Simp., v. Am. orassus.														ļ				
crassiusculus, Simp., v. Am. crassus.			ļ															
crassoides, Simp., v. Am. Desplacei.																		
crassulosus, Simp., v. Am. crassus.		l																
crassulus, Simp., v. Am. Desplacei.	İ																	
crassus, Y. & B., p. 253; Phil., G. Y., pl. xii., f. 15; (Stephanoceras) T. & B., p. 300, pl. xiii., f. 5; Wr., Lias Am., p. 481, pl. lxxxvi., f. 1, 2, 8-10; Am. raquinianus, d'Orb., T. J., t. evi.; Am. Andrea?, annuliferus, incrassatus, crassulo- sus, crassibundus, cras- siusculus, crassiuscu- losus, puteolus, Simp., p. 86-90.												T	T ₁ S ₁				Jm S	
crenularis, Simp., v. Am. Charmassei.		l																
Crosbeyi, Simp., v. Am. Desplacei.		١																
cultellus, Buck. v. Am. oxynotus.							:	1		1	l							
decussatus, Simp., v. Am. aculeatus.		l		ľ		A Albert Methods		ſ			l							
defossus, Simp., Mon. Am., p. 15; (Ægoceras) T. & B., p. 282, pl. vii., f. 9; Am. anguliferus, Phil., G. Y., pl. xiii., f. 19; Am. omissus, Simp., p. 77.								1										Much resembles An capricornus.
dejectus, Simp., v. Am. oxynotus.											l							
delicatus, Simp., v. Am. gracilis.																		
Dennyi, Simp., v. Am. Loscombi.																		
denotatus, Simp., v. Am. Collenoti.																		
densinodus, Wr., and T. B., Part I., v. Am. obso- soletus.									,									
depressus, Simp., v. Am. margaritatus.																		
depressus, Ziet., v. Am. compactilis.															and the same of			

	i i	١		- · ·	owo	er.	—	1	Mid	ldle.		U p	per	,				
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornns.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. Desplacei, d'Orb., T. J., pl. 107; (Stepha- noceras) T. & B., p. 300; Am. crassulus, Cros- beyi, crassoides, crassi- factus, Andersoni, Simp., p. 86-90.												T	T S?				Jm	Allicd to Am. crassus.
difformis, Emmrich, v. Am. semicostatus. diversus, Simp., Mon. Am., p. 13 (non Phil.); (Ægoceras) T. & B., p. 282, pl. viii., f. 3.								ΤP										Allied to Am. capricornus and Am. gagateus.
Dudressieri, d'Orb., v. Am. planicosta.			ļ															
easingtonensis, Simp., v. Am. heterophyllus. elegans, Y. & B., p. 267, pl. xiii., f. 11 (non Söw.); (Harpoceras) Wr., Jasa Am., p. 447, pl. xiii., f. 1-5; Harp. concavus, T. & B., p. 303; f. Am. concavus, Sow., M. C., t. 94, f. 2.								. :			T	Wr S					Jm 1 S	
elegans, Am. exaratus T. & B. (non and Am. ser- Sow.) v. pentinus. elegans, Simp., v. Am. cæcilia.																		The true Am. elegans, Sow., does not ap- pear to be a Lias shell. The Yorkshire specimens so named sre probably Am.
elegantulus, Y. & B., v. Am. exaratus.	i	•																exaratu s.
Engelharti, (d'Orb.) T. & B., v. Am. leuticularis.	,																	
erugatus, Beau, v. Am. planorbis. exaratus, Y. & B., p. 266, (Harpoceras) T. & B., p. 305, pl. ii.,f. 5; Wr., Lias Am., p. 441, pl. lxii., f. 1, 2, 3; Am. elegantulus, Y. & B., p. 267; Am. subplanatus, Dum., Dép. Jura., pl. x., xi., f. 1, 2, 8; H. elegans, T. & B., p. 306.												Ţ					Jm	Compare also Buck- man, Geol. Mag.,1887, p. 399.
exaratus, Phil., v. Am. lythensis.						İ												
exasciatus, Simp., v. Am. spinatus.																		,
exortus, Simp., v. Am. raricostatus.	i								,		- 1						I	
fabalis, Simp., v. Am. comensis.											1			1				
falcifer, Sow., v. Am. ser- pentinus.						-			1		!				i		l L	

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Sprcies.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. falcifer, Quenst., v. Am. nitescens. fasciatus, Simp., v. Am. cornucopia.																		
ferrugineus, Simp., 1885, p. 79 (non Oppel); (Amaltheus?), T. & B., p. 296, pl. vii., f. 5; Am. complanatus, Y. & B., p.268, Am. conjunctivus, Simp., p. 114.									T	T 1 2 Jm 1 2								Similar to Am. lenti- cularis.
fibulatus, Sow., M. C., 407, f. 2; Y. & B., pl. xiii., f. 9; (Stephanocerus) T. & B., p. 301; Wr., Lias Am., p. 476, pl. lxxxv., f. 5-11; ? Am. Andree, Simp., p. 91; Am. armatus, Y. & B., 1822, pl. xiii., f. 9.													T				Jm	
figulinus, Simp., v. Am. capricornus.		١									İ							
fimbriatus, Sow., M.C., t. 164; (Lytoceras) T. & B., p. 297; Wr., Lias Am., p. 407, pl. lxxi., f. 1; pl. lxxii., f. 1-4; Am. cornucopia, Simp., p. 69 Am. lineatus, Oppel & Quenst.							T 1 S 1	Ţ	T							Jn	Jm	
fimbriatus, Simp., v. Am. cornucopia.		l									l	,						
finitimus, Blake, (Ægoceras?) Yorksh. Lias, p. 278, pl. vi., f. 9.				7 3 8							,							Leck. Coll. Allied to
flavus, Simp., v. Am. Simpsoni.										,	l							
fonticulus, Simp., 1855, p. 57; (Stephanoceras) T. & B., p. 301, pl. 1, f. 10; Am. foveatus, Simp., p. 89.							,					T						Extreme form of Amsubarmatus.
foveatus, Simp., v. Am. fonticulus.																		
Fowleri, Buck., v. Am. impendens.		l																
gagateus, Y. & B., pl. xii., f. 7; (Mgoceras) T. & B., p. 275, pl. vi., f. 8; Wr., Lias Am., p. 864, pl. xxxvii., f. 8, 9; Tur- rilites Coynarti, d'Orb., T. J., pl. 42, f. 4-7; Am. neglectus, integricos- tatus, cereus, illatus, ?, Simp., pp. 67, 76, 77.					T 6 Jn										Jn S	ו		

				L	owe	er.			Mi	ddle.	L	Up	per	•				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
germanii, d'Orb., v. Am. hircinus. geometricus, Phil., v. Am. solitarius. geometricus, Simp., v. Am. spinatus. geometricus, Oppel, v. Am. semicostatus. gracilis, Simp Mon. Am., p. 20 (non Buck.); (Stephanoceras) T. & B., p. 302, pl. vii., f. 8; ? Am. delicatus, Simp., p. 86, T. & B., p. 174. Greenoughi, Sow., M. C., t. 132; (Phylloceras) T. & B., p. 296; (Amalthus) Wr., Lias Am., p. 284, pl. xliv. Grenouillouxi, d'Orb., v. Am., pettos.				T ?								T1 2 S1 4						
gubernator, Simp., v. Am. jurensis. Hamiltoni, Simp., v. Am. armatus. Hartmanni, Oppel, v. Am. semicostatus. hastatus, Y. & B., v. Am. armatus. hawskerensis, Y. & B., v. Am. spinatus. Heberti, Oppel, Juraformation, p. 158; (Ægoceras) T. & B., p. 280; Am. brevispina, d'Orb., T. J., pl. 79 (non Sow.). Henleyi, T. & B., v. Am. heterogenes. Henleyi, d'Orb., v. Am.						P												One example, You Museum. = Am. latæcosta (Wright).
heptangularis, Y. & B., v. Am. striatus. heterogenes, Y. & B., pl. xiv., f. ?; (Ægoceras) Wr. Lias Am., p. 370, pl. xxxv., f. 4-6; xxxvi., f. 1-4; Am. hybrida, d'Orb., T. J., pl. 85; Æg. Henleyi, T. & B., p. 281.			-					T										Old form of Am. cap

				L	ow€	r.			Mic	ldle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. heterophylins, Sow., M. C., t. 266; Phil., G. Y., pl. xiii, f. 2; (Phylloceras) T. & B., p. 297; Wr., Lias Am., p. 424, pl. lxxvii., f. 4; lxxvii., f. 1, 2; Nautilus vohit- biensis, Y. & B., pl. xiii., f. 1; Am. easingtonen- sis, Simp., p. 63.								**				T	T ₇				Jm S	
heterophyllus numismalis, Quenst. & Oppel., v. Am. Loscombi. hidensis, Y. & B., v. Am.																		
bifrons. hircinus, Schloth, Petref., p. 72; (Lyto- ceras) Wr., Lias Am., p. 415, pl. lxxv., f. 4-7; lxxvi., f. 6; Am. Ger- manie, d'Orb., T. J., pl. 101; T. & B., p. 298.														T				
Holandrei , d'Orb., T. J., pl. 105, f. 1; (Stephanoceras) T. & B., p. 299.										$J_{\frac{n}{2}}$			T				S Jm	Form between Am. communis and Am. annulatus.
Huntoni, Simp., Mon. Am., p. 41; (Amaltheus) T. & B., p. 293, pl. ii., f. 8; Am. simplex?, Am. retentus?, Simp., p. 120.					Т?		T?			The second of th					Jm			In the Leckenby Coll.
hybrida, d'Orb., v. Am. heterogenes.																		4.g
ignotus, Simp., v. Am. Regnardi. illatus, Simp., v. Am.																		
gagateus. impendens, Y. & B., p. 286; (Arietites) T. & B., p. 290, pl. vi., f. 7; Wr., Lias Am., p. 302, pl. xxii. A, f. 1–5; Am. Fowleri, Buck. Geol., Chelt., p. xii., f. 7; Am. radiatus, Simp., p. 128.					Tr 1 Jm 1										Jm S			Wright (pl. xxiia., f. 1-5) in Leck. Coll.
incrassatus, Simp., v. Am. crassus.	Ì																	
inornatus, Will., v. Am.														-				Aller See Aller was a seen a
insignis, Schüb., in Zieten, Verst. Würt., p. 20, pl. xv., f. 2; (Harpoceras) T. & B., p. 310; Wr., Lias Am., p. 453, pl. lxv., f. 1-6; lxv1., f. 1-3; Am. Phillipsii, Simp., p. 113; Am. inornatus, Will. MS. Wright, Q. J. G. S., vol.									,	v				W T?			1	Also in the Blea Wyke- Bede (Tate and Blake). See also Williamson, Trans. Geol. Soc., ser. 2 vol. v., p. 228.
xvi., p. 4. E 69512.	1	- 1	. 1	l	Į,	į	ı	λ	; ţ	ļ	- 1	ı	1	[}	į	1	1	G

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. integricostatus, Simp., v. Am. gagateus. involutus, Simp., v. Am. socialis. Jamesoni, Sow., M. C., t. 555, f. 1; (Egoceras) T. & B., p. 279; Wr., Lias Am., p. 352, pl. xi., f. 4-6; li., f. 1-6; Am. Regnardi, d'Orb., T. J., pl. 72. Jamesoni, (pars) Sow., v. Am. sagitiarius. Johnstonii, Sow., M. C., t. 449, f. 1; (Egoceras) T. & B., p. 271; Wr., Lias Am., p. 311, pl. xix, f. 3, 4; Am. torus, d'Orb., T. J., p. 212, pl. 53: Am. Belcheri, Simp., Mon. Am., p. 12, 1843; Wr., Lias Am., p. 313, pl. xv., f. 7-9; pl. xix., f. 1, 2. jurensis, Ziet. Verst. Würt, pl. 68, f. 1; (Lytoceras) T. & B., p. 298; Wr., Lias Am., p. 413, 481, pl. lxxiv., f. 3-5; lxxix.; Am. gubernator, Simp., 1855, p. 40. kridion, d'Orb., v. Am. semicostatus. lacunatus, Buckman, Geol Chelt 1845, p. 105	T. B.	Tie	T1 2 6	mp	Wr	Ax	T12 Jm1		An	An	Ψ	An		T Im	ol.	W	Ω	Dr. Wright gives Am. Belcheri as a distinct species, but at the same time he states that he is inclined to group it under Am. Johnstonii. See Mon. Lias Am., p. 315. Wright (pl. xv., f. 7-9) in Leck. Coll. Also in the Blea Wyke Beds (Tate & Blake).
Geol. Chelt., 1845, p. 106, pl. xi., f. 4, 5; Quenst., Jura, pl. xii., f. 4-6; (Ægoceras) Wr., Lias Am., p. 330, pl. lvi., f. 16-18. lamellosus, d'Orb., v. Am. Taylori. laqueolus, Schloenbach, Beitr. Pal., 1866, p. 162, pl. xxvi., f. 1; Am. liassicus, tortilis, d'Orb., T. J., pl. 48 and pl. 49; (Ægoceras) Wr., Lias Am., p. 315, pl. xv., f. 1, 2, 10-12; xvi., f. 1, 2. latescens, Simp., 1855, p. 100; (Harpoceras) T. & B., p. 308, pl. vii., 7, s., b; Am. Samanni, Oppel, Juraf., p. 242. Leckenbyi, Wright, Liss Am., p. 344, pl. xxx., f. 1-7.			Wri	1	I I I Affirm a American I I I I I I I I I I I I I I I I I I I)m		— we con				T						Rare.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am onnulotus	A.III. alliulabus.	Am, serpentinus.	Am. communis.	Am. jurensis.	Lower Liss.	Middle Lius.	Upper Lias.		Remarks.
f Ammonites-cont.	!					!														
lectus, Simp., Mon. Am., p. 34; (Harpoceras) T. & B., p. 309, pl. viii. f. 7, Am. lympharum, Dum. Dép. Jura., pl. xvi., f. 5, 6.															T					
Leignelettei, d'Orb., v. Am. Charmassei,	ļ			 																
lens, Simp., v. Am. lynx.	1									.	, [
lenticularis, Y. & B., 289; (Amaltheus) Wr., Lias. Am., p. 482, pl. lxxxii., f. 14, 16; Am. lenticularis, reticularis, Simp., p. 114; Amal- theus Engelharti, T. & B., p. 294.										W Ji	r									
leptophyllus, Simp., v. Am. lythensis.		ļ									١									
Levisoni, Simp., Mon. Am., p. 54; Dum., Dép. Jura., pl. ix., f. 3, 4; (Harpoceras) T. & B., p. 307; Wr., Lias. Am., 438, pl. lx., f. 1, 2; lxi., f. 1-6.						1							T 1					Jı	n	Tearly allied to Am . $bifrons$.
liassicus, d'Orb., v. Am		١							١		١									
lineatus, Schlotheim Petref., p. 75; Quenst Ceph., t. vi., f. 8; (Lyto ceras) T. & B., p. 298 Wr., Lias Am., p. 409 pl. lxix, f. 1; Am. tenvi costatus, nitidus, Y. & B., p. 253, & Simp. p. 69, 70.	;												T						S	pecimen in Scarborough Museum labelled "Lower Lias." Probably out a fine-ribbed variety of Am. fimbriatus.
lineatus, Oppel. and Quenst., v. Am. fim briatus.	ı					,														
lineatus, Simp., v. Am Simpsoni.	$\cdot $	١							1											
longipontinus, Oppel Pal. Mitt., pl. xli., f. 1 2; (Ægoceras), T. & B. p. 273, pl. v., f. 4.	,		7	J ₁	m	-										J	m		- 1	Resembles Am. Johnstonii. F. & B. (pl. v., f. 4) in Jm.
Locardi, Dum., v. Am Scoresbyi.	١.					1														
Loscombi, Sow., M.C. t. 183; d'Orb., T. J., pi 75; (Phylloceras), T. 4 B., p. 296; Wr., Liu Am., p. 419, pl. xl., 4, 5 Am. ambiguas, Simp 1855; Am. Dennyi, arc tus, nanus ?, Simp., p. 6 86; Am. heterophyllu numismalis, Quenst and Oppel.	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5							r l												

				I	ow	er.			Mie	idle.		Up	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am, Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinafus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. luridus, Simp., v. Am. capricornus. lympharum, Dum., v. Am. lectus. lynx, d'Orb., T. J., pl. 87, f. 1-4; (Amaltheus) T. & B., p. 292; Am. lens, Simp., p. 116. lythensis, Y.&B., p.267; Phil., G. Y., pl. xiii., f. 6; (Harpoceras) T. & B., p. 304; pl. li., f. 44; pl. kiii., f. 45, 6; Am. concavus ? d'Orb., T. J., pl. 116; Am. exaratus, Phil., G. Y., pl. xiii., f. 7; Am. multifoliatus; leptophyllus, Simp., p. 108, 116. Macdonnellii, Port., v. Am. nodotianus. maculatus, Y. & B., v. Am. capricornus. mammillatus, Simp., v. planicosta. margaritatus, Mont., (Amaltheus) Conch. Syst., p. 90, f. xxiii.; T. & B., p. 293; Wr., Lias Am., p. 397, pl. liii.; liv., f. 1-3; lvi., f. 6-16, 19, 20; Am. acutus, Sow., M. C., t. 191; Am. clevelandicus, vittatus, ? subnodosus, nodulosus, y. & B., pl. xiii., f. 3, 7; pl. xiv., f. 11; Am. vittatus, margaritatus, Phil., G. Y., pl. xiii., f. 3, 7; pl. xiv., f. 11; Am. vittatus, margaritatus, Phil., G. Y., pl. xiii., f. 3, 7; pl. xiv., f. 11; Am. vittatus, subnodosus, nodulosus, y. & B., pl. xiii., f. 4; pl. xiii., f. 3, 7; pl. xiv., f. 11; Am. vittatus, subnodosus, vittatus, subnodosus, vittatus, subnodosus, subnodosus, vittatus, subnodosus, simp., pp. 118, 119, 123. Marshallani, Simp., pp. 118, 119, 123. Marshallani, Simp., v. Am. aculestus. Maugenesti, d'Orb., T. J., i. p. 254, pl. 70; (Ægoceras) Wr., p. 359, pl. xxxvii., f. 1, 2. miles, Simp., v. Am. armatus. Moorei, Lyc., v. An. armatus. Moorei, Lyc., v. An. armatus.							Ti		T124	T1 2	Tz		Tisi		T. e	Jm 1 S 1 \$	Jm	Resembles Am. Buvi gnieri, d'Orb. Wright (pl. lxii.,t, 4-6, in Leck. Coll.

				L	owe	er.			Mid	ldle.		Up	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Janiesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
${\bf Ammonites} - cont.$																		
multanfractus, Simp., v. Am. semicostatus.																		
multicostatus, Sow., v. Am. bisulcatus.												,						
multifoliatus, Simp., v. Am. lythensis.																		
mutatus, Simp., v. Am. aculeatus.																		•
nanus 7, Martin, Pal. Strati. de l'Infralias, pl.1, f.3-5; (Ægoceras) T. & B., p. 272, pl. v., f. 1.			T														1	Single specimen.
nanus, Simp., v. Am. Loscombi.																		
nativus, Simp., v. Am. validus.																'		
neglectus, Simp., v. Am.																		
niger, Blake, (Ægoceras nigrum) Yorksh. Lias, p. 274, pl. vi., f. 6.				T														
nitescens, Y. & B., p. 257; (Harpoceras) Wr., Lias Am., p. 432, pl. xlix., f. 2-7; Simp., p. 125; Am. faloier, Quenst. Jura, t. 22, f. 28; Am. algovianus, (Oppel) T. & B., p. 302, pl. viii., f. 1.									T Jm									
nitidus, Y. Am. cornucipia. & B., v. Am. lineatus.																		•
nodotlanus, d'Orb., T. J., p. 198, pl. 47; (Arietites) Wr., Lias Am., p. 300, pl. xxxvii, Am. Macdonnellii, Port., Rep. on Lond., p. 134, pl. xxix. A, f. 12; T. & B., p. 290, pl. v., f. 8.						T 1 6												
nodulosus, Y. & B., v. Am. margaritatus.																		
nodulosus, T. & B., v. Am. obesulus.	.																	
obesulus, Blake, (Arietites) Yorksh. Lias, p. 284, pl. vi., f. 2; Am. nodulosus. T. & B., Yorksh. Lias, Part I.				T											S			
obliquatus, Y. & B., v. Am. variabilis.									ŀ								١.	c';

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				L	owe	r.			Mid —	ldle.		Upp	er.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jureusis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Ammonites—cont.	_																	
obsoletus, Simp., 1843, Mon. Am., p. 23; (Ægo- ceras) T. & B., p. 276, pl. vii., f. 1, a, b: Æg., densinodus, T. & B., Part I.; Wr., Lias Am., p. 350, pl. xxviii., f. 5, 6; xxxix., f. 6-10; l., f. 11, 12; Am. vitrus, cereus, Simp., p. 76, 77.					T 1 6 Jm 1		S								S			,
obtusus, Sow., M. C., t. 167; (Aristites) T. & B., p. 287; Wr., Lias Am., p. 293, pl. xxi., f. 1- 5; Am. Smithii, Sow., M. C., t. 406; Am. Turneri, Quenst. Cepb., p. 77, t. iii., f. 19.					T													Am. stellaris, when young, is often mis- taken for this species.
omissus, Simp., v. Am. defossus.											ļ							
ophioides, d'Orb., T. J., pl. 64, f. 3-5; (Arietites) T. & B., p. 288.					T,?													·Leek. Coll.
Oppell, Schlönbach, Zeit. Deutsch. Geol. Ges., Bd. xv., p. 515, t. xii., f. 2; (Amaltheus) T. & B., p. 293; Am. com- planatus, Simp., p. 115 (non Sow. non Y. & B.).					T ?													Whitby Museum and Leck. Coll.
ovatulus, {Am. aalensis. Simp., v. {Am. cæcilia.	İ								l									
ovatus, Y. & B., pl. xiii, f. 4 (non Phil.); (Har- poceras) Wr., Lias Am, p. 446, pl. kiii., f. 4-7; Harp. primordiale, (Schloth.) T. & B., p. 366, pl. ii., f. 7.												Wr	Wi T				Jm S	
ovatus, Phil., v. Am.																		
owenensis, Simp., v. Am. armatus.																		
oxynotus, Quenst., Flötz. Würt., p. 161; Ceph., pl. v., f. 11; Wr. Q. J. G. S., vol. xvi., p. 407; (Amaltheus) T. & B., p. 291; Wr., Lias. Am., p. 887, pl. xlvi., f. 4-6; Am. polyphyllus, Robinsoni, Buckii, dejectus, Simp., p. 117-122; Am. cultellus, Buck., Geol. Chelt., pl. xii., f. 5.				Jm	Jn		Jm								Jn			
Pauli, Dum., Étud. Pal. sur les Dép. Jura., pl. xxix., f.5,8; (. Egoceras) T. & B., p. 273 pl. vi. f. 4 a, b.				T														Single specimen.

				L	owe	r.			Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni,	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	!Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. Pellati, Dum. Étud. Pal. sur les Dép. Jura., pl. xliii., f. 4-6 (Agoceras) T. & B., p. 273, pl. vi. f. 5.				T														Allied to Am. Pauli.
psrsonatus, Simp., v. Amscipionianus. pettos, Quenst. Flötz. Wirt., p. 178; Ceph., p. 179, t. 14, f. 8; (Ægoceras) Wr., Lias Am., p. 863, pl. xxxvii., f. 5- 7; lxix., f. 5, 6; Am. Grenouillouxi, d'Orb., T. J., pl. 96; T. & B., p. 280.							Wi								,	Jņ		
Phillipsii, Simp., v. Am. insignis. pinguis, Simp., v. Am. comensis. planicosta, Sow., M. C., t. 73, f. 1-5; Y. & B., pl. xiii., f. 6; (Ægoceras) T. & B., p. 275; Wr., Lias Am., p. 385, pl. xxiv., f. 1-8; Am. ziphius, Hell, Ziet., Verst. Würt., t. v., f. 2; Am. Dudressieri, d'Orb., T. J., pl. 103; Am. mammillatus, si-					Ţ										S			In the young form resembles Am.capricor nus.
d'Orb., T. J., pl. 103; Am. mammillatus, siphuncularis, convolutus, Simp., p. 73, 101, 126. planorbis, Sow., M. C., t. 448; (Ægoceras) T. & B., p. 270; Wr., Lias Am., p. 308, pl. xiv., f. 1-4; Am. erugatus, Bean, Phil., G. Y., pl. xiii., f. 18; Am. psilonotus, Quenst.		T 1 2 5													S 5 5 Ju 1 2	1		Wright (pl. xiv., f. 1, 2) in Leck. Coll.
plicatilis, Simp., v. Am. socialis. polymorphus, Quenst., v. Am. trivialis.																		
polyphyllus, Simp., v. Am. oxynotus.																		
primordialis, (Schloth.) T. & B., v. Am. ovstus.											ļ							
psilonotus, Quenst., v. Am. planorbis.											١							
puteolus, Simp., v. Am. crassus. quadricornutus, Simp., v. Am. Taylori.																		

				L	0W	er.	_		Mid	dle.		Upj	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Ammonites—cont. radians depressus, Quenst., v. Am. striatulus. radiatus, Simp., v. Am. impendens. raquinianus, d'Orl., v. Am. crassus. raricostatus, Ziet., Petref. Würt., pl. xiii, f. 4; (Egoceras?) T. & B., p. 276; (Arietites) Wr., Lias Am., p. 298, pl. vii., f. 2-6; pl. xxvi., f. 5-14; p. Am. exortus, Simp., p. 78. redcarensis, Y. & B., v. Am. angulatus. Regnardi, d'Orb., v. Am. Jamesoni. resupinatus, Simp., v. Am. Huntoni. reticularis, Simp., v. Am. lenticularis. retusus, Simp., v. Am. aculeatus. Ripleyi, Simp., v. Am. trivialis.					Ŧ										Jm 1 8			
Robinsoni, Simp., v. Am. oxynotus. rotiformis, Sow, M. C., t. 482; (Arietites) T. & B., p. 286; Wr., Lias Am., p. 278, pl. v., f. 1-4; pl. vil., f. 1; pl. ix., f. 1-3. rudis, Simp., Mon, Am., p. 44; (Harpoceras) T. & B., p. 310. rugatulus, Simp., v. Ain. aalensis. rutilans, Simp., v. Am. trivialis. Sæmanni, Oppel., v. Am. latescens. sagittarius, Blake (Ægoceras) T. & B., p. 276, pl. vil., f. 2; Wr., Lias Am., p. 355, pl. lii., f. 1-5; jil. A., f. 1-6; Am. Jamesoni (pars) Sow. & Simp.				TP?	T Jm									Т?	\$21			Single specimen, Leck Coll. This resembles Among comensis.

				L	0W6	er.			Mid	ldle.		Up	per.					
Species.	Rhætie Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Vm. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont. sauzeanus, d'Orb., T. J., pl. 95, f. 4, 5; (Arietites) T. & B., p. 288; Wr., Lias Am., p. 281, pl. viii., f. 1-6; Am. spinaries, Quenst., Jura, pl. vii., f. 4; T. & B., p. 286; Am. rssupi- natus, transformatus, Simp. p. 73, 130.				T 1 6														Am. transformatus, is more common in the Drift of Holderness.
Scipionianus, d'Orb., T. J., pl. 51, f. 7, 8; (Arietites) T. & B., p. 287, pl. v., f. 3; Wr., Lias Am., p. 289, pl. xiii., f. 1-3; pl. xix., f. 8-10; Am. personatus, Simp., p. 65. Scoresbyi, Simp., Mon. Am., p. 12; (Ægoceras) T. & B., p. 275; Am. Locardi, Dum., Dep.				T Jm											T			? Variety of <i>Am. Bir-chii</i> . Single specimen, Wm.
semicarmatus, Simp., v. Am. subarmatus. semicelatus, Simp., Mon. Am., p. 22, and 1855, p. 50; (Stephanoceras) T. & B., p. 299.				T	Ţ						T Jm	Si			J _m			Allied to Am. annu-Tatus.
pl. xii., r. 10; (Arietites) T. & B., p. 288, pl. vi. f. 4a (upper); Wr., Lias Am., p. 284, pl. 1, f. 4-8; Am. kridion, d'Orb., T. J., pl. 51, f. 1, 2; Am. geometricus, Hart- mannsi, Oppel, Jura, p. 79 (non Phillips); Am. multanfractus, acuticarinatus, Simp., pp. 133, 134; Am. Bod- leyi, Buck., Geol. of Chelt., pl. iii. f. 7; Am. difformis, Emmrich, Jahrb. K. K. Geol. Reioh., 1853, p. 383; T. & B., p. 289, pl. vi., f. 3 a, b.				3	1										82 1 2			,
serpentinus, Reiu., Naut. et Argon., f. 74, 75; (Harpoceras) T. & B., p. 307; Wr., Lias Am., p. 433, pl. lviii., f. 1-3; Am. Strangewaysi, falcifer, Sow., M. C., t. 254; Am. mulgravius, Y. & B., pl. xiii., f. 8; Am. atternatus, Simp., p. 123; f. H. slegans, T. & B. sigmifer, Phil., v. Am. aslensis.												T 7					Jm S 7	The synonomy of this species requires further eluodation. See Buckman, Geol. Mag., 1887, p. 396.

				I	OW(er.			M	iddle	٠[1	Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am arran latur	Am. annuanns.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ammonites—cont.																			
similis, Simp., Mon. Am., p. 34, and 1855, p. 74; (<i>Harpoceras</i>) T. & B., p. 304, pl. 1, f. 4.													Si 1						Near to Am. lythensis and Am. subconcavus.
simplex, Simp., v. Am. Huntoni.																			
Simpsoni, Bean, in Simp. Mon. Am., p. 37. (Amattheus) T. & B., p. 291, pl. viii.,f. 4; Wr., Lias Am., p. 392, pl. xlvii.,f. 4-7; Am. flavus, limatus, Simp., p. 123.					T											Jm S 1			Near to Am. oxynotus, Wright (pl. xlvii, f. 4-7) in Leck, Coll.
sine murie nsis, d'Orb., T. J., pl. 95, f. 1-3; (Aristites) T. & B., p. 287.				T															
sinuatus, Simp., 1855, p. 62; (Ægoceras) T. & B., p. 283.																Si			Single specimen in the Whitby Museum.
siphuncularis, Simp., v. Am. planicosta.						į		ļ			l								
Smithii, Sow., v. Am. obtusus.	1																		
socialis, Simp., 1855, p. 39; (<i>Ægoceras</i>) T. & B., p. 278, pl. vii., f. 6; <i>Am. plicatilis</i> , Simp., Mon. <i>Am.</i> ; <i>Am. involutus</i> , Simp., p. 67.				1		T													$?=Am.\ armatus.$
solitarius, Simp., 1855, p. 93; (Amaltheus), T. & B., p. 295, pi, viii, f. 2; Am. geometricus, Phil., G. Y., p. xiv., f. 9, (non Y. & B. non Oppel).										T 1 2 Jm									Resembles Am. spinatus.
spicatus, Simp., v. Am. armatus.	١							ı						ļ					
spinaries, Quenst., v. Am. sauzeanus.	İ							ı											
spinatus, Brug. Ency. Megh., tom. i., p. 40; d'Orh., T. J., pl. 52; Phil., G. Y., pl. xii., f. 8; (Amattheus), T. & B., p. 295; Wr.; Lias Am., p. 402, pl. lv., f. 1, 2; pl. lvi., f. 1-5; Am. hawskerensis, Y. & B., pl. xiv., f. 2; Am. Birdi, geometricus, subnodo- sus, exasciatus, Simp. p. 127-131; Am. costa- tus, Quenst., Ceph., pl. v., f. 10.; ? Am. subno- dosus, Y. & B., p. 258, pl. xiil., f. 3; (Aristites) Wr., Lias Am., p. 288, pl. vi., f. 2, 3.									T 1 2 2	T 7							m S 1 2		Wright gives Am. sub- nodosus as a distinct species, but appears to have some doubt on the matter. It is very nesr to Am. spinatus.

				L	owe	r.			Mid	dle.		Upj	er.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am, armatus.	Am, Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinstus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jnrensis.	Lower Lias.	Middle Lias.	Upper Lias.	· Remarks.
Ammonites—cont.		<u> </u>	·—	İ	Ì		<u> </u>								İ			
spiratissimus, Queust., Handb. der Petref., t. xxvii., f. 9; (Arietites) T. & B., p. 285; Am. Conybeari, (pars) Simp., p. 136.					Ţ													Allied to Am. Conybeari.
stellaris , Sow., M. C., t. 93; (<i>Arietites</i>) T. & B., p. 287; Wr., Lias Am., p. 295, pl. xxii., f. 1-6.					T T													Often mistaken for Am. Bucklandi and Am. obtusus.
Stokesi, Sow., v. Am. mar- garitatus.																		
Strangewaysi, Sow., v. Am. serpentious.																		
striatulus, Sow, M. C., t. 421, f. 1; (Harpoceras) T. & B., p. 308; Wr., Lias Am., p. 451, pl. 1xxxiv., f. 4-6; (Grammoceras) Buokman, 1 1f. Ool. Am., p. 173, pl. xxvii., f. 7-10; pl. xxviii., f. 16-21; Am. thouarsensis, d'Orb., T. J., pl. 57; Am. radians depressus, Quenst., Ceph., pl. vii., f. 4-6; ? Am. comensis, Von Buoh., Petref. Remark., pl. ii., f. 1-3.														Jm 1 S?	1			
striatus, Rein., Naut. et Argonaut., f. 65, 66; (Ægoceras) T. & B., p. 281; Wr., Lias Am., p. 378, pl. xlü., f. 1-5; Am. heptanyularis, Y. & B., pl. xiv., f. 1; Am. Henleyi, d'Orb., T. J., pl. 88; and Simp. (non Sow.).						S	T									Jn		
subarmatus, Y. & B. 1822, pl. xiii, f. 3; 1828, pl. xiv, f. 8; Sow., M. C., t. 407, f. 2; (Stephanoceras) T. & B., p. 301; Wr., Lias Am., p. 477, pl. lxxxv., f. 1-4; Am. semiarmatus, vortex, vorticellus?, Simp., p. 92, 93.	1												T i				Jm	
subcarinatus, Y. & B., (Nautilus) pl. xii., f. 9; Phil., G. Y., pl. xiii., f. 3; Oppel, Pal. Mitth., pl. xliv., f. 1, 2; (Phylloceras) T. & B., p. 297; Wr., Lias Am., p. 428, pl. lxxxi., f. 1–3.													T				Jm	
subconcavus, Y. & B., pl. xiii., f. 5; (Harpoceiras) T. & B., p. 304, pl. viii., f. 8; ? Am. boulbiensis, Y. & B., p. 267.						-							T			1	Bu	1
subnodosus, Y. & B.; and Simp., v. Am. spinatus.																		

				I	owe	er.			Mic	idle.		Up	per.					
Species,	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Ammonites—cont.																		
subplanatus, Dum.,v. Am. exaratus.																	Ì	
subplanicosta, Oppel, Juraf., p. 89.				i.	Jm													T. & B. consider this the young of Am obsoletus. Am. suplanicosta Survey Mem. 98 N.W., p. 5, v. Am carusensis.
subtriangularis, Simp., v. Am. armatus.							1											car usensis.
sulcatus, Simp., v. Am. Charmassei.																		
tardecrescens, Hauer, Ceph. aus der Lias, t. iii., f. 10-12; (Arietites) T. & B., p. 285, pl. v., f. 5, a, b; Am. aureolus, Simp., p. 134.						T												Allied to Am. Cony beari.
Taylori, Sow., M. C., t. 514; (Ægoceras) T. & B., p. 279; Wr., Lias Am., p. 348, pl. xxxi., f. 5-7; Am. lamellosus, d'Orb., T. J., pl. 84; Am. cornutus, Simp., 1855; Am. quadricornutus, Simp., p. 106.						T							'					There are two varieties of this species. Am cornutus, Simp. = Am. Taylori costatus Quenst. Am. quadricornutus, Simp. = Taylori nodosus Quenst. Ceph., t. ix. f. 20, 21.
tenellus, Simp., v. Am. Collenoti.														`				
tenuicostatus, Y. & B., v. Am. lineatus.																		
tenuispina, Simp., v. Am. brevispina.		ŀ			-													
thouarsensis, d'Orb., v. Am. striatulus.														ĺ				
tortilis, d'Orb., v. Am. laqueolus.																		
torus, d'Orb., v. Am. Johnstonii.																		
transformatus, Simp., v. Am. sauzeanus.																		
trivialis, Simp., Mon. Am., p.10; (Amaltheus) T. & B., p. 292, pl. v., f. 6, a, b, c, d; Am. polymorphus, Quenst., Ceph., t.iv., f. 9-18; Am. rutilans, Ripleyi, Simp., p. 72, 74.						T	T 2 5 1											?= Aeg.polymorphum Wright, p. 376, pl. xl. f. 1-3.
tubellus, Simp., 1855, p. 42; (<i>Ægoceras</i>) T. & B., p. 279, pl. v., f. 7.						T												Young form of Am armatus,

				L	owe	r.			Mid	dle.		Upp	er.	ĺ				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am, annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Ammonites—cont. Turneri, Sow., M. C., t. 452; Phil., G. Y., pl. xiv., f. 14; (Arietites) T. & B., p. 286; Wr., Lias Am., p. 292, pl. xii., f. 1-6; Am. Turneri, Am. Bucklandi (pars) Simp. p. 135, 138. Turneri, Quenst., v. Am. obtusus. Valdani?, d'Orb., T. J., p. 255, pl. T1; (Egoceras) Wr., Lias Am., p. 357, pl. xxxviii., f. 1-4; pl. 1xix.,				Ti			Si								S 1 6 Jm 1			Jermyn Street, Museum. Allied to Am. Maugenesti.
f. 2-4; Am bipunctatus, Röm., Verst. Ool., p. 193. validanfractus, Simp., v. Am. bisulcatus, Simp., v. Am. bisulcatus, Simp., 1855, p. 62; (Ægoceras) T.& B., p. 278, pl. vii., f. 3; Am. armatus, Y. & B., pl. xiv., f. 2; Am. nativus, Simp., p. 101. variabilis, d'Orb., T. J., p. 350, pl. 113; (Harpoceras), Wr., Lias Am., p. 455, pl. 1xvii (Haujoili, (Haujoili, Haujoili, Haujoili, (Haujoili, Haujoili, Haujoili, (Haujoili, Haujoili,	3			1	- C - C - C - C - C - C - C - C - C - C	4	Control on	the Constitution of the Co	\	2		5	Jm	T			Sı	Probably Haugia jugosa, Buckman, Inf. Ool. Am., p. 149, pl. xxii., f. 11-15, pl. xxiv., pl. xxv., f. 1.
Buckin. Inf. Ool. Am., p. 142, 146, pl. xxv., f. 2; Am. obliquatus, Y. & B., p. 265; Am. Beanit, Simp., p. 113; T. & B., p. 309. vermis, Simp., v. Am. annulatus. viticola, Dum., Étud. Pal. sur les Dép. Jura., pl. xxxi, f. 9-13; (Ægoceras?) T. & B., p. 274. vitreus, Simp., v. Am. obsoletus. vittatus, Y. & B., and				Tř	T													Single specimen Leck Coll. Allied to Amaricostatus.
vittatis, 1. & B., and Phil., v. Am. margarita- tus. volutus, Simp., v. Am. margaritatus. vortex, Simp., v. Am. subarmatus, vorticellus, Simp., v. Am. subarmatus, Walcottii, Sow., v. Am. bifrons. whitbiensis (Nautilus), Y. & B., v. Am. hetero- phyllus.					lan,	b						1					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i.

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SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Buoklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	•	REMARKS.
Ammonites—cont. ziphius, Ziet., v. Am. planicosta.	!																		
Belemnites: acuarius, Schloth., v. B. tubularis.														'					
acumnatus, Simp., 1855, p. 29; Phil., Brit. Bel., p. 56, pl. ix., f. 21, 22; G. Y., pl. xxviii., f. 10; T. & B., p. 320; B. ferreus, politus, Simp., pp. 39, 43.										T		Ţ	Jm			P	P		
acutus, Miller, Geol. Trans, ser. ii., vol. ii., pl. viii., f. 9; Sow., M. C., t. 590, f. 7 (non 10); d'Orb., T. J., p. 94, t. 9, f. 8-14; Phill., Brit. Bel., p. 33, pl. i., f. 1; G. Y., pl. xxviii., f. 1; T. & B., p. 315; B. brevis, var. A., Blainv., Mcm. sur les Bel., p. 86, pl. iii., f. 1, 1a; B. depressus, Simp., p. 51.			Jm	T 6 Jm	Ţ										P	P			
apicicurvatus, Blainv. Mém. sur les Bel., pl. ii., f. 6, 6a; Phil. Brit. Bel., p. 49, pl. vi., f. 16; T. & B., p. 319; B. repandus, Simp., p. 35; B. inæqua- lis, Simp., Nat. Hist. Rep., 1866, p. 216; Phil., Brit. Bel., p. 91; † B. paxillosus numismalis, Quenst., Ceph., pl. 23, f. 21.							T Jm	T Jm	T	Trust of the state						P			
araris, Dum., Dép. Jur., pt. 3, pl. iv., f. 20-25; T. & B., p. 317, pl. iv., f. 6.						T 1 6	T Jm	1											
aspergilium, Blake, Yorks. Lias p. 318; B. perforatus, B. lævigatus Simp., pp. 44, 49. athleticus, Simp., 1855,	,						T	Ţ						T					
p. 28; T. & B., p. 326. breviformis, Voltz, Obs. sur les Bel., pl. ii, f. 2-4; Phil., Brit. Bel., p. 41, pl. iv., f. 9, 10; G. Y., pl. xxviii., f. 6; (bis) 8 (nou f. 11); T. & B., p. 320; B. breviformis amalthei, Quenst., Ceph., p. 405, t. 24, f. 21- 23.								T 1 2	T	T 1 2 3 6 Jm 1 2	T1 2 Jn 1 2 6	1				P	J _n	a	
brevis, Simp., v. B. acutus. bruguierianus, d'Orb., v. paxillosus.	- 1																		
calcar, Phil., Brit. Bel., p. 33, pl. ii., f. 5; T. & B., p. \$16.				T	r	·													

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Belemuitescont.																		
carinatus, Simp., v. B. longisulcatus.																		
charmouthensis, Mayer, Journ. Conch., 1866, p. 364, t. vi.; Dum. Dép. Jur., pt. 3, pl. v., f. 8; T. & B., p. 317, pl. iv., f. 5; B. clavatus, Simp., p. 54 (non Blain- ville).						1 /	T Jm											`
clavatus, Blainv., Mém. sur les Bel., pl. iii., f. 12; Quenst., Ceph., p. 398, f. xxiii., f. 19; d'Orb., T. J., p. 103, t. ii., f. 19-23; Phil., Brit. Bel., p. 39, pl. iii., f. 7; T. & B., p. 318; B. pistilliformis, Sow., M.C., t. 589, f. 3; B. spadix ari, fusteolus, tenuis? Simp., pp. 34, 53, 54; B. claviformis, Phil., G. Y., pl. xxvii., f. 4-6.							T Jm	Jm	T Jm	T 2					Pisi	Pi		
clavatus, Simp., v. B.																		
claviformis, Phil., v. B. clavatus. compressus, Stahl, Correspond., 1824, pl. xxxiii., f. 4; Quenst, Ceph., pl. xxiv., f. 18, 19; Phil., Brit. Bel., p. 41, pl. iii., f. 8; T. & B., p. 321; B. fournelianus, d'Orh., T. J., p. 97, pl. x., f. 7-14.										T								
compressus, Blainv., v. B. inornatus, Tab. II.									ļ		l							
compressus, Pbil., v. B. vulgaris.		ļ										,						
compressus, Voltz, v. B. Voltzii.												1						
compressus, Y. & B., v. B. crossotelus.														,				
eoncavus, Simp., v. B. inæquistriatus.	•																	
conicus, Simp., v. B. rudis.	•											, r						
crossotelus, Blake Yorksh. Lias, p. 328: B. compressus, Y. & B. pl. xv., f. 5; Einip. p. 38 (non Stahl)	,											1						
curtus, Simp., v. B. vul- garis	-																	

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Belemnites—cont. cylindricus, Simp., 1855, p. 29; Phil., Brit. Bel., p. 86, pl. xx., f. 52 p; G. Y., pl. xxviii., 14; T. & B., p. 319. dens, Simp., 1855, p. 30; Phil., Brit. Bel., p. 39, pl. ii., f. 6; G. Y., pl. xxviii., f. 3; T. & B., p. 316. densus, Simp., v. B. vulgaris. depressus, Simp., v. B. vulgaris.					Si				T	T 1 2	T 1 2 Jm				P	Pi	P	Single specimen in the Whitby Museum.
acutus. distortus, Simp., v. B. subaduncatus. dorsalis, Phil., Brit. Bel., p. 58, pl. x., f. 24; G. Y., pl. xxvii., 2nd fig. miscalled 8: T. & B., p. 324. elegans, Simp., 1855, p. 31; Phil., Brit. Bel., p. 84, pl. xx., f. 50; G. Y., pl. xxviii., f. 11 (non 8); T. & B., p. 317. elongatus, Sow., M. C., t. 590, f. 1; Quenst. Ceph., p. 402, pl. 24, f. 3; Huxley, Mem. Geol. Survey, Mon. II., pl. 1, f. 2, 3; Phil., Brit Bel., p. 50, pl. vii., f. 17; T. & B., p. 325; B. turris?, Simp., p. 49. elongatus, d'Orb., v. B. tripartitus.							T	Auto de la companya d	:: .			Ti	The state of the s		P		Pis?	Horizon unknown, Barton (Map, 93 N.E).
erosus, Simp., v. B. inæquistriatus. expansus, Simp., v. B. subaduncatus. ferreus, {B. acuminatus. B. Milleri. fournelianus, d'Orb., v. B. compressus. fusteolus, Simp., v. B. clavatus. glaber Simp., v. B. vulgaris, inæqualis, Phil. & Simp., v. B. apicicurvatus.																		

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SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus,	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias,	Upper Lias.	Remarks.
delemnites—cont.																		8 8 524 TEMP
in ac quistria tus, Simp., 1855, p. 24; Phil., Brit. Bel., p. 83, pl. xix., f. 43; T. & B., p. 325; B. acuarius tricana- liculatus, Quenst., Ceph., p. 414, pl. xxv., f. 13-15; H. concavus, crosus, Simp., pp. 27, 29.												T					P	Whitby Museum.
incisus, Simp., v. B. tri- partitus.														'		,)) 1	Fr. de
inclusus, Simp., v. B. vulgaris.					İ										-	,	1.	4
incurvatus, Quenst., v. B. vulgaris.		ł							. '									
infundibulum, Phil., Brit. Bel., p. 36, pl. i., f. 3; T. & B., p. 315.			T	T 1 6 Jm	T													
latisulcatus, Phil., Brit. Bel., p. 46, pl. v., f. 14; G. Y., pl. xxvii., f. 1; T. & B., p. 323; B. obtusus, robustus, Simp., p. 40.				1							T.		Jm 2				P	
lævigatus, Simp., v. B. aspergillum.		l				4									-			
Phil., Brit. Bel., p. 57, pl. x., f. 23, 26; G. Y., pl. xxvii., f. 4, 5; T. & B p. 323; B. trivialis, Simp., p. 34.												T 1 2 Jm	T	J ₁			P	:
lentus, Simp., v. B. sub-aduncatus.																		
levidensis, Simp., 1855, p. 29; T. & B., p. 322, pl. iu., f. 3 a, b, and 7.													T Jn					,
Yorksh. Lias, p. 320, pl. iv., f. 8 a, b.									Ţ	T 2 4			-					
longisulcatus, Voltz, Obs. sur les Bel, pl. vi., f. 1; B. acuarius longi- sulcatus, Quenst., Ceph., p. 412, t. 25, f. 23; Phil., Brit. Bel, p. 82, pl. xix., f. 47; T. & B., p. 325; B. carinatus?, Simp., p. 42.				4		THE PROPERTY AND A STREET OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPE	1					T		Jm			Pi	
microstylus, Phil., Brit. Bel., p. 66, pl. xiii., f. 31; T. & B., p. 321.						1				Jm								, jn ,
Milleri, Phil., Brit. Bel., p. 54, pl. viii., f. 19; G. Y., pl. xxvii., f. 12; T. & B., p. 319; ? B. ferrcus (pars), Simp., p. 43.									T Jm	T							Jr	

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SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remanks.
Belemnites—cont. nitidus, Phil., v. B. virgatus.																		
obtusus, Simp., v. B. lati-			:														ŀ	
 palliatus, Dum., Dép. Jur., pt. 8, pl. v., f. 9-17; T. & B., p. 316, pl. iv. f. 4. 						T												Near to B. dens.
paxillosus, Schloth., Taschenb., 1813, pp. 51 and 70; Petref., p. 46; Quenst., Ceph., p. 402, pl. 24, f. 1, 2, 4-8; Phil., Brit. Bel., p. 47, pl. vi., 15; pl. xx., f. 52; T. & B., p. 321; B. brugwieri- anus, d'Orb, T. J., p. 84, t. 7, f. 1-5.						·		-		T 1 Jm 1 2						P		
penicillatus, Sow., M. C., t. 590, f. 6, 9, ? 5; Phil., Brit. Bel., p. 34, pl. i. f. 2; G. Y., pl. xxviii., f. 2; T. & B., p. 316.				T 6		J _m									P			
perforatus, Simp., v. B. aspergillum.	Į																	
pistilliformis, Sow., v. B. clavatus.																		
politus, Simp., v. B. acu- minatus.																,		
pollex, Simp., 1855, p. 27; Phil., Brit. Bel., p. 55, pl. ix., f. 20; G. Y., pl. xxviii., f. 9; T. & B., p. 321.							P.P						T		P		ņ	
productus. Simp., v. B. tubularis.																		
repandus, Simp., v. B. apicicurvatus.																		
robustus, Simp., v. B.																ľ		
rudis, Phil., Brit. Bel., p. 76, pl. xvi., f. 42; G. Y., pl. xxviii, f. 13; T. & B., p. 321, pl. iv., f. 9; ? B. contcus, Simp., pl. 52.										T 2 Jm 1 2						P 1 8 1 2		
scabrosus, Simp., Nat. Hist. Rep., p. 216; Phil., Briv. Bel., p. 85, pl. xx., f. 51; G. Y., pl. xxviii., f. 7; T. & B., p. 322.							P 9				T				P			Rare.
spadix-ari, Simp., v. B. clavatus.				1 1 1														

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Belemnites—cont. spicatus, Simp., v. B. tripartitus.																		
striolatus , Phil., Brit. Bel., p. 59, pl. x., f. 25; G. Y., pl. xxvii., f. 2, 3; T. & B., p. 323; B. substriatus, Sinp., p. 32.											T 2	T 1 2 P 1					P Jm	
Subaduncatus, Voltz, Obs. sur les Bel., pl. iii., f. 2; Phil., Brit. Bel., p. 63, pl. xi., f. 29; G. Y., pl. xxvii., f. 7; T. & B., p. 324; B. distortus, lentus, expansus, Simp., pp. 30, 34, 35.												T 1 2					P	
substriatus, Simp., v. B. striolatus.																		
subtenuis, Simp., 1855, p. 26; Phil., Brit. Bel., p. 60, pl. x., f. 27; G. Y., pl. xxvii. f. 6; T. & B., p. 324.												Ţ					P	
telum, Simp., v. B. Voltzii.								-904										
tenuis, Simp., v. B. clavatus.					· .			of the contract of										
tricanaliculatus, Quenst., v. B. inæquistriatus.					· •									Ï		ì		`
tripartitus, Schloth., Petref., p. 48; Quenst., Ceph., p. 419, t. 26, f. 14, 31; Phil., Brit. Bel., p. 62, pl. xi, f. 28; G. Y., pl. xxvii., f. 8; T. & B., p. 325; B. elongatus, d'Orb, T. J., p. 90, pl. 8, f. 11; B. trisulculosus, incisus, spicatus, Simp., pp. 30, 33.	¥											T					P	
trisulculosus, Simp., v. B. tripartitus.								-		Į								
trivialis, Simp., v. B.										ļ								
tubularis, Y. & B., 1822, pl. xiv., f. 6; Phil., G. Y., pl. xii., f. 20; pl. xxviii., f. 15; Simp., p. 26; Phil., Brit. Bel., p. 68, pi. xiv., f. 36; T. & B., p. 325; B. acuarius, Schloth. Pet., p. 46; B. groductus, Simp., Nat. Hist. Rep., p. 216.					1. The state of th			and the second s				T P					P S I Im	Phil. (pl. xiv., f. 36) in Bristol Musey m.
turris, Simp., v. B. elonga-								April 1-magan						,		٠	,	
validus, Simp., 1855, p. 28; T. & B., p. 323, pl. iii., f. 4.										1	1 6			.]	,			Lecality unknewn.

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Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Belemnites-cont. ventralis, Phil., v. B. Voltzii.														apr wife .				•
virgatus, Mayer, Jour. Conch., 1866, p. 190, t. iii.; Dum., Dep. Jur., pl. iv., f. 1-6; T. & B., p. 318, pl. iv., f. 7, a, b, c; P. B. ntidus, Phil., Brit. Bel., pl. xiii, f. 34.					Mall of the same	T	T	!	T 1						P			
Voltzii, Phil., Brit. Bel., p. 79, pl. xvii., f. 43; G. Y., pl. xxvii., f. 9; T. & B., p. 326; B. compressus, Voltz, Obs. sur les Bel., pl. v., f. 1, 2; B. ventralis, Phil., Brit. Bel., p. 86, pl. xvii., f. 44, 45; f B. telum, Simp., p. 32.					Miles of the same of the same			7.7				Ţ	J _m				P	
vulgaris, Y. & B., 1822, pl. xv., f. 1; Simp., p. 38; Phil., Brit. Bel., p. 75, pl. xvi., f. 49, 41; G. Y., pl. xvii., f. 11; T. & B., p. 392; B. compressus, Phil., G. Y., pl. xiii., f. 21; B. incurvatus, Quenst., Ceph., p. 418, pl. xxvi., f. 15; B. glaber, densus, inclusus, curtus, Simp., p. 27, 28, 32, 39; B. whitbyensis, Oppel, Juraf., p. 238.										T Jm			Ti Jmi				P	See Phil. Brit. Bel., p. 91.
Beloteuthis: Leckenbyi, Blake, Yorksh. Lias, p. 314, pl. iv., f. 2, a, b.												Tf						Leck. Coll.
subcostatus, Münster, Reiträg. No. VI., t. 5, f. 2; Woodward's Man., pl. ii., f. 8; T. & B., p. 313; (Loliginites) Quenst., Ceph., t. 32, f. 7, 8.												T						Single specimen.
Geoteuthis: coriaceus, Quenst., Ceph., t. 34, f. 5; f. & B., p. 314, pl. iv., f. 1; Sepia obtusalis, haustrum, Simp., p. 18, 19.												T ₁						
Loliginites: subcostatus, Quenst., v. Beloteuthis.																		
Nautilus: annularis, Phil., v. N. striatus.																		•

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SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lies.	Upper Lias.	REMARKS.
Nautilus—cont. araris, Dum., Dep. Jur., Pt. 3, pl. vi., f. 7; T. & B., p. 312.						T												Single specimen.
astacoides, Y. & B., pl. xiii., f. 2: Phil., G. Y., pl. xii., f. 16; T. & B., p. 313.												T	T Jm				P	
astacoides, Simp., v. N. Youngi.													1,5					
heteragenus, Simp., v. N. jurensis.								Mental Colon colon			-							
intermedius, Sow., M. C., t. 125; T. & B., p. 312.					T			76 10								}	-	
jurensis?, Quenst., Jura, t. 41, f. 1.; T. & B., p. 313; N. hetcrogenus, Simp., p. 60.								ATTENDED TO STATE OF THE STATE							P		T ?	Locality unknown.
striatus, Sow., M. C., t. 182; T. & B., p. 312; N. undulatus, Y. & B., 1828, p. 272; N. annu- laris, Phil., G. Y., pl. xii., f. 18; Simp., p. 59.		Т 6	T 1 2 6	T 1 3		: :		ulc)							Jm		P	
undulatus, Y. & B., v. N. striatus.														- Annual Property		ur I		, , , , , , , , , , , , , , , , , , ,
whitbiensis, Y. & B., v. Am. heterophyllus.								ı						10 10 10		-		
Youngi , Simp., p. 59; <i>N. astacoides</i> , Simp., 1855, p. 33.														Aper college dates.				Horizon doubtful.
Teudopsis: cuspidatus, Simp., (Sepia) 1855, p. 21; T. & B., p. 314, pl. iv., f. 3 s, b.					4			Manufacture of				T;		derigh.	-	, , ,		T. & B. (pl. iv., f. 3) in Leck. Coll.
PISCES. Acrodus: minimus, Ag., Poiss. Foss., 3, p. 145, t. 22, f. 6-12; T. & B., p. 255.	T		T		T.			. Personal distribution of the control of the contr						No. Committee a second				
nobilis, Ag., Poiss. Foss., 3, p. 140, t. 21; T. & B., p. 255.				T				7								!		Teeth.
Æchmodus: ovalis, Egerton, v. Dapedius.																		
Aspidorhynchus: Anglicus?, Ag. 2, pt. 2, p. 139 (name only).														•		76	P	"Whitby Lias" (Agassiz). Probably dentary bone of Eugna-
																		thus; Brit. Mus. Cat. (Smith Woodward).

				L	owe	r.			Mid	dle.		Upp	per.					,
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am, oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am, communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Belonorhynchus: acutus 7 Ag., (Belonostomus), 2, pt. 2, 142, t. 47 a, f. 3, 4; T. & B., p. 259. Belonostomus:												T						Yorkshire? May come from Lyme Regis.
acutus, Ag., v. Belonorbynchus. Dapedius: MICANS?. Ag., 2., p. 304, (name only); T. & B., p. 257.			T i														P	"Whitby Lias" (Agassiz). Specifically indeterminable scales; Brit. Mus. (Smith
ovalis*, Ag., (Tetra- gonolegis) 2, p. 209, t. 21, f. 3; (Æchmodus) T. & B., p. 258.		T										T						Woodward). Becorded, upon uncertain evidence from the U. Lias of Whitby. Single tooth.
EUGNATHUS: FASCICULATUS?, Ag., 2, pt. 2, p. 105 (name only). Gyrolepis:																	?	"Whitby Lins" (Agassiz).
albertii, Ag., 2, p. 173, t. 19, f. 1-6; Port., Geol. Lond., p. 469, t. 14, f. 12- 14; T. & B., p. 258.	T 3																	
Gyrosteus: mirabilis, Ag., 2, pt. 2, p. 179 (name only); T. & B., p. 256, pl. ii., f. 2, 3; Sepia incomposita, Simp., 1355, p. 21.												Ţ	T					Various bones; Brit. York and Whithy Museums.
Hybodus: minor, Ag., 3, pp. 48, 183, t. 8 b, f. 2, 3, and t. 23, f. 21-24; T. & B., p. 256.		T	T															Tooth.
reticulatus, Ag., 3, pp. 50, 180, t. 9, f. 1-9, and t. 24, f. 26; T. & B., p. 255.				Т														Tooth.
Lepidotus: pectinatus, Egerton, Mem. Geol Snrvey, dec. 6, pl. 3: Ag., 2, p. 305; T. & B., p. 258.												T						Imperfect fish; Brit. Mus.
rugosus, Ag., 2, p. 246, t. 33 a, f. 1-8; T. & B., p. 258.									ĺ			T		,				Scales, &c. Brit. and Whitby Museums.
semiserratus, Ag., 2, p. 240, t. 29a, b; T. & B., p. 258; "Pikes," Y. & B. 1822, p. 261, pl. 16, f. 7, 8.												Ţ						Very common.

				L	owe	r.			Mid	ldle.		Upj	er.		Ball der of the sandleder			,
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. onnulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lins.	Upper Lias.	Remarks.
Leptolepis: saltviciensis, Simp., 1855, p. 19; T. & B., p. 260, pl. iii., f. 1. NOTIDANUS: AMALTHEI?, Oppel, Mit. Liaa Schwabens, pl. i., f. 1; T. & B., p. 256.) = grandymus years	d and the state of	a security as also	Charles a Call Control of the Call Control of			T			T			Application of the state of the			Whitby and Scarb, Mus. Recorded apon the evidence of undster- minable fragments. See A. Smith Wood- ward. Geol. Mag. 1886, pp. 208, 525; Cat. of Fossil Fish. Brit. Mus. Pt. I. 1839, p. 168; and Cat. of Foss. Vert. 1890, p.
Pachycormus: ACUTEOSTRIS, Ag., 2, pt. 2, p. 114 (undefined); T. & B., p. 260.			And the second s		4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e gendlem an hod.						9						"Whitby Lias" (Agasaiz). British and Scarb.
curtus, Ag., 2, pt. 2, p. 112, t. 59; T. & B., p. 259. GRACILIS, Ag., 2, pt. 2, p. 114 (undefined); T. & B., p. 259.			,									T ₁ ?						Mus. York Museum.
LATIROSTRIS, Ag., 2, pt. 2, p. 114 (undefined); T. & B., p. 259.						Manuschan er v						T,						York Museum?
LATUS, Ag., 2, pt. 2, p. 114 (undefined); T. & B., p. 260.				,								T						Type in Enuiskillen Coll. Bm.
macropterus, Ag., 2, pt. 2, p. iii., pl. 59 a; T. & B., p. 260.		١			,	2000 0 0		1				T						York Museum.
Pholidophorus: germanicus, Quenst. Jura, p. 234, pl. xxx., f. 9-11; A. S. Woodward Geol. Mag. 1891, p. 545.	,																Br	n
Ptycholepis: bollensis, Ag., 2, pt. 1 p. 11; pt. 2, p. 108, t 58 b; T. & B., p. 259.												7						York Museum.
Sauricthys: <pre>apicalis, Ag. 2, pt. 2 p. 85, t. 55 a, f. 6-11; T & B., p. 257.</pre>	}	T																
Tetragonolepis: ovalis, Ag., v. Dapedius.																		1
REPTILIA. Crocodilus: bollensis, Jäger., v. Stened	0-								,									
Engyommasaurus: Brongniarti, Kaup., Pelagosaurus.	v.				.				Commission vira				,					

		_		L	owe	r.	_		Mid	dle.		Up	per.					
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias	Remarks.
Eretmosaurus: dubius, Lyd., v. E. macropterus.																		,
macropterus, Seeley, (Plesiosaurus) Ann. Nat. Hist., 1865, vol. xv., p. 50; ? "P. dubius," T. & B., p. 246, pl. i, f. 7, 8; P. rugosus, T.&B., p. 252.			T?										T					P.grandipennis, Camb. Museum. Teeth from Cliff.
rugosus, Owen, (Plesio- saurus) Brit. Assoc. Rep., 1939, p. 82; Lias Rept., 1865, p. 34, pl. xiv., xv. (non T. & B., p. 252).																	P	
Ichthyosaurus: acuttrostris, Owen, Brit. Assoc. Rep., 1839, p. 121; Lias Rept., 1881, p. 121; pl. xxviii, f. 2; Phil., G. Y., pl. xii., f. 2; T. & B., p. 253; Lyd., Geol. Mag., 1888, p. 31.													T					
crassimanus, (Owen) Blake, v. I. trigonodon.		١																
intermedius, Conybeare, G. Tr. 1824, p. 108, t. 15, f. 9; Owen, Brit. Assoc. Rep., 1839, p. 112; Lias Rept., 1881, p. 113, pl. xxiv., f. 7; pl. xxx., f. 1, 2; T. & B., p. 254.					Tr							-						
latifrons, König., Leon. Sect. Foss., pl. xix., f. 250; <i>L. longirostris</i> , Owen, Lias Rept., 1881, p. 124. pl. xxv., f. 2; pl. xxviii, f. 3; pl. xxxii, f. 7, 8, 9; pl. Jager, Verhandl. K. Leop. Car. Akad., vol. xxv., Part II., p. 937, t. xxx.; T. & B., p. 254.													T?					
longifrons, Owen, v. I. zetlandicus.							Ì											
longirostris, Owen, v. I.																		
platyodon, Conyb., G. Tr., 1822, p. 108, pl. xv., f. 7, pl. xvi., f. 1-7; Owen, Lias Rept., 1881, p. 115, pl. xxiv., f. 4, pl. xxxi., f. 1-3.								,									Ov 1 P	
tenuirostris, Conyb., G. Tr., 1824, p. 108, pl. 15, f. 10; T. & B., p. 254; Owen, Lias Rept., 1881, p. 122, pl. xxiv., f. 8; pl. xxv., f. 3; pl. xxxii., f. 1-6.														•			9	U. L. Whitby (A. & Woodward). Horzon uuknown. (Yor & British Museum.)

				L	owe	r.			Mid	dle.		Upj	per.	1				
Species.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Ichthyosaurus—cont. trigonodon, Theodori, Gelehrte Auz. k. bay. Akad. Wiss., 1843, vol. xvi., p. 906; Lyd., Cat. Foss. Rept., 1889, p. 105; § I. crassimanus, Owen, Yorksh. Phil. Soc. Rep., 1858 (name only); Blake, Yorksh. Lias, p. 253, pl. 1, f. 9. zetlandicus, Seeley. Q. J. G. S., 1880, vol. xxxvi., p. 635, pl. xxv.; I. longifrons, Owen, Lias Rept., 1881, p. 118, pl. xxiii., f. 1-5; pl. xxiv., f. 1; pl. xxv., f. 1, pl. xxvi., f. 1; pl. xxvi., f. 2-5.								and indicates and any other					T				Cm	See Lydekker, Geol. Mag. 1888, p. 311; and 1889, p. 44. Type in Camb. Mu- seum.
sp. sp. Mystriosaurus, v. Steneosaurus.	T	T 6		T														Vertebræ. Bones.
Pelagosaurus: Brongniarti, Kanp. (Engyomnasaurus), Neues Jahrb., 1835, p. 623; Lyd., Cat., p. 107. Teleosaurus Chapmani, Owen Brit. Foss. Rept.; p. 180, pl. xv., f. 1 (Crocodilia): ? Teleosaurus eucephalus, Seeley Q. J. G. S., vol. xxxvi., p. 627, pl. xxiv. typus?, Bronn., Gav.						77.00											Bm	14,792, 15,506, R 757, R 4, and 11,589. Seeley (pl. xxiv.) in Cm.
Rept., p. 28; Lyd. Cat., p. 106.																	١	14,437.
Plesiosaurus: brachycephalus, Owen, v. P. macrocephalus. coelospondylus?, Owen, Lias Rept., 1865, p. 12; T. & B., p. 252. Cramptoni, Carte & Baily, v. Thaumatosaurus. homalospondylus, Owen, Lias Rept., p. 12, ple. v-yiii; T. & B., p. 246 longirostris, Blake, Yorksh. Lias, p. 250, pl. i., f. 6; pl. iii., f. 2; ? P. cælospondylus, Owen	-		•									T	T					? = P. longirostris Vertebræ, Whitby Museum. British, York, and Whitby Museums.

				İ	owe	r.			Mid	ldle.		Up	per.					
SPECIES.	Rhætic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus.	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Atr. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	REMARKS.
Piesiosaurus—cont.																		
macrocephalus, Buckl. (ex Conybeare, MS.) Geol. & Min., 1887, vol. ii., p. 30, pl. xix., f. 1; Owen, G. Tr., 1838, vol. v., p. 515, pls. 43, 45; P. brachycephalus, Owen, Brit. Assoc. Rep., 1839, p. 69, and Brit. Foss. Rept., 1884, p. 178, pl. xv.																,	P	į
macrocephalus, Carte & Baily, v. Thaumato-saurus propinquus.															,			
macropterus, Seeley, v. Eretmosaurus.																	ا. ا	, , , , , , , , , , , , , , , , , , ,
propinquus, Blake, v. Thaumatosaurus.																		
rugosus, Owen, v. Erct-mosaurus.																		
Zetlandi, Phil., v. Thau- matosaurus.																		
sp.									1	T								Skeleton from Eston.
sp.		l								Tr.	l							Two coracoids from Skinningrove.
sp.		ŀ					T	T										Vertebræ.
Rhomaleosaurus Cramptoni, Seeley, v. Thaumatosaurus.																		
Scaphognathus:																		
Purdoni, Newton, Proc. Roy. Soc., 1888, p. 436; Phil. Trans., 1888, p. 503, pl. 77, 78.										0000			2					
Steneosaurus :													,					
bollensis, Jäger, (Cro- codilus) Foss. Rept. Würt., 1828, p. 6; Lyd., Cat., p. 109.																	Bur	
brevior, Blake, Yorksh. Lias, p. 244, pl. 1, f. 1-3; Lyd., Cat., p. 111; (Teleosaurus), Owen, Brit. Fos. Rept. (Crocodila), p. 140, pl. xvi.; (Mystriosaurus) A. S. Woodward, Geol. Mag., 1885, p. 499.												T					Bm	British Museum, N. 14,781, R 756, R 28: and 20,691.

•				L	owe	r.			Mid	dle.	_	Upı	er.					
SPECIES.	Rhactic Beds.	Am. planorbis.	Am. angulatus.	Am. Bucklandi.	Am. oxynotus.	Am. armatus.	Am. Jamesoni.	Am. capricornus,	Am. margaritatus.	Am. spinatus.	Am. annulatus.	Am. serpentinus.	Am. communis.	Am. jurensis.	Lower Lias.	Middle Lias.	Upper Lias.	Remarks.
Steneosaurus—cont. Chapmani, Buckland, [ex König, Ms.] (Teleosaurus) Geol. and Min., vol. ii., p. 35, pl. xxv., f. 1; Chapman and Wooler, Phil. Trans., 1758, p. 688; Y. & B., pl. xvi., f. 1-3; Owen, Brit. Assoc. Rep., 1841, p. 75; T. & B., p. 243; Lyd., Cat., p. 110; (Mystriosaurus) A. S. Woodward, Geol, Mag.,													T				Bm	British Museum. Nos 1037a, B 324, 14,438. Y. & B. (pl. xvi., f. 1-3) in Wm.
1835, p. 499. STREPTOSPONDYLUS: SP. Owen, Brit. Assoc. Rep. 1871, p. 90. Teleosaurus: brevior, Owen v. Steneosaurus. brevirostris?, Owen, Pal., 1861, p. 299, f. 103 ³ ;												Ow					Ow	Phalangeal bone. Whitby Museum.
? Steneosaurus brevior, S. Chapmani, or S. bollensis. Chapmani, König. v. Steneosaurus. eucephalus?, Seeley, Q. J. G. S., 1880, vol. xxxvi., p. 627, pl. xxiv.; ? Pelagosaurus Brong-																	P	Cambridge Museum.
niarti, Kanp. Thanmatosaurus: Cramptoni, Carte and Baily (Plesiosaurus) Brit. Assoc. Rep., 1862, p. 68, Journ. Roy. Dub. Soc., vol. iv., p. 160, pl. v.; T. & B., p. 246; Rhomaleosaurus, See- ley, Q. J. G. S., vol. xxx.,													T					
p. 448. propingus, Blakc, (Plesiosaurus) Yorksh. Lias, p. 247, pl. ii., f. 1; P. macrocephalus, Carte & Baily, Journ. Roy. Dub. Soc., 1863, vol. iv., p. 169. zetlandicus, (Plesiosaurus) Yorksh. Phil. Soc. Rep., 1853 & 1854, p. 7 (name only); Carte and Baily, Journ. Roy. Dub. Soc., 1863, vol. iv., p. 169; P. Zetlandi, T. & B., p. 249, pl. i, f. 5.												T	T					This is called P. Simp soni in index c synonyms. T. & E Yorkshire Lias, T. & B. (pl. i., f. 5) in York Museum.

TABLE II.

LOWER OOLITE SPECIES.

TABLE II.

LOWER OOLITE SPECIES.

	1201	ER .		(IL)	OFEC	JIES.	
	Estu	Lower Estuarine Series.		ddle arine ries.	Estu	per arine ries.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
PLANTÆ. CRYPTOGAMIA (VARIA). Calamites: Beanii, Bunbury, v. Schizoneura. Equisetites:							
columnaris, Brong., v. Equisetum. lateralis, Phil., v. Phyllotheca.				. }			
Equisetum: columnare, Brong. (Equisetites) Hist. 1, p. 115, t. 13; Phil. G. Y., p. 197, Lign. 4, 5; Oncylogonatum carbonarium, König, G. T., ser. 2, vol. ii., t. 32, f. 1-6.	P Le	P	P	P			
Fucoides: arcuatus, L. & H., t. 185; Phil. G. Y., p. 195, Lign. 1; (Sphærococcites) Sternb., pt. 7 & 8, p. 104.			P Le				Very obscure. May bs F. erectus (Nathorst).
diffusus, Phil., v. F. erectus. erectus, Bean, MS., Leck., Q. J. G. S., vol. xx., p. 81, pl. xi., f. 3; Phil., G. Y., p. 196, Lign. 3; F. diffusus, Phil. G. Y., p. 196, Lign. 2.			P Le	P Le			Probably a Liver-moss (Nathorst). Type in Leck, Coll.
Glossopteris: Phillipsii, Brong., v. Sagenopteris.							
Isoetites: murrayanus, Zigno, v. Solenites (Gymnospermæ), p. 141.							
Lycopodites: falcatus, L. & H., t. 61; Y. & B., 1828, pl. 2, f. 7; Phil. G. Y., p. 198, Lign. 6.	Le			P			
uncifolius, Phil., v. Walchia Williamsonis (Gymnospermæ), p. 141.							
Williamsonis. Brong., v. Walchia (Gymnospermæ), p. 141.		ļ					
Oncylogonatum: carbonarium, König, v. Equisetum columnare.							
Otopteris:. cuneata, L. & H., v. Sagenopteris.							
lanceolata, Bean, v. Otozamites gracilis (Gymnospermæ), p. 139.	į			ı			

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	Estu	wer arine ries.	Estu	ldle arine ies.	Estu	per arine ics.	
SPECIES.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton:	White Nab.	Scalby.	Remarks.
(CRYPTOGAMIA)-cont.							
Otopteris—cont. ovalis, L. & H., v. Tæniopteris, (Filices), p. 136.							
Phyllotheca: lateralis. Phil., (Equisetites) G. Y., p. 197, pl. x., f. 3; L. & H., t. 186.	P Le		P	P N			Jm.
Sagenopteris:			1	;			
cuneata, L. & H. (Otopteris), t. 155; Leck., Q. J. G. S., vol. xx., p. 76.		Ì	Le				
Phillipsii, Brong., (Glossopteris) Hist. 1, p. 225, t. 61 his, f. 5; t. 68, f. 2; Phil., G. Y., p. 208, pl. viii., f. 8; L. & H., t. 63; (Sagenopteris) Sternb. 2, p. 165; Pecopteris paucifolia and Peclongifolia, Phil., 1829.			P Le Ym				Near to S. undulata (Nathorst), Phil. type in York Museum.
sp.	i		ĺ		İ		Near to S. rhoifolia, Presl (Nathorst).
Schizoneura:			i		l		(2100110230).
Beanii , Bunbury (<i>Calamites</i>), Q. J. G. S., vol. vii., p. 189; Gard- ner, Geol. Mag., 1886, pl. ix., f. 3.	P						
sp. Sphærococcites, v. Fucoides.				N			Allied to S. hosrensis Schimp. (Nathorst).
CRYPTOGAMIA (FILICES).							
Acrophorus?							Lower Oolite Yorksh. Coast
sp.							Lower Oolite Yorksh. Coast (Nathorst).
Acrostichites: princeps, Presl, (Sphenopteris) Sternberg, Flora der Vorw., vol. ii., p. 129, t. lix., f. 12, 13; Göpp., Gatt. d. foss. Pflanz., t. 10, f. 3, 7; Sphenopteris modesta, Bean, MS., Leck., Q. J. G. S., vol. xx., p. 79, pl. x., f. 3; Phil., G. Y., p. 213, Lign. 28, 29 F.		N	P Le	Le			Leck. (pl. x., f. 3) in Leck. Coll.
tenuis, Brong., t. 110, f. 3, 4; Nathorst, p. 57 (non Pec. tenuis, Auct., nec Asplenium tenue, Heer).				4		1	Cambridge Museum. Allied to A. göppsrtianus (Nathorst).
Williamsonis, Brong. (Pecop- teris), Hist. 1, p. 324, t. 110, f. 12; L. & H., t. 126 (non Phil.): Neu- ropteris recentior, L. & H., t. 68; (Pecopteris) Phil., G. Y., p. 211, pl. viii., f. 15.			P Le	Le			Jm.
Alcthopteris:							
Göepperti, Et., v. Pec. polydactyla.						·	
polypodioides, L. & H., v. Phlebopteris.							

	Estu	wer arine ries.	Estu	ddle arine ries.	Esti	oper parine rios.	
Species.	Hayburn und Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	. Rewares.
(CRYPTOGAMIA)—cont. Anthrophyopsis: n. sp. Aspidites: williamsonis, Göpp., v. Tæniopteris major.				N			Lower Ool., Yorksh. Coast (Nathorst).
Aspidium? 5p. Aspleniopieris: Nilssoni, Phil., v. Anomozamites Jindleyanus p. 136. (Gymnospermæ),							Lower Ool., Yorksh. Coast. Near to A. marginale, Swartz. Labelled Acrostichites Williamsonis. Brong, in some collections (Nathorst).
Asplenium: crgutulum, Heer, Jura Flora Ostsib., p. 16, pl. xix., f. 1-4; Nathorst, Ofv. k. Veteu. Akad. Pörh., 1880. No. 5. petruschiense, Heer, Flora Foss. Arct., vol. v., pf. 2, 1878; Mem. Acad. Imp. Sci. St. Petersb., ser. vii., t. xxv., No. 6, p. 3, t. 1, f. 1; Nathorst, op. cit.					N		Bm. and Cm. Yorksh. Coast (Nathorst).
whitbiense, Brong., (Pecopteris) Hist. 1, p. 321, t. 109, f. 2-4; L. & H., t. 134; Phil. G. Y., p. 208, pl. viii., f. 17; (Cladophlebis) Leb. Cat.; Pec. hastata, Phil., 1829; Pec. tenuis, Auct. (non Brong.). Camptopteris:	P Le	P					Jm.
whitbiensis, Brong, MS., v. Clath ropter:s. Cladophlebis: haiburnensis, L. & H., v. Pecopteris. insignis, L. & H., v. Pec. denticulata. recentior. Phil., v. Acrostichites Williamsonis.					•		Wm.
whitbiensis, Brong., v. Asplenium. n. spp. Clathropteris: whitbiensis, Brong. Ms, Nathorst, op. cit., p. 62; (Camptopteris) Whitby Museum.					N		Also several species imperfectly r , served (Nathorst). Lower Colite, Yorksh. Coast. Wm.
Conlopteris: murrayana, S. himp., v. Thyrsopteris. Ctenis, v. Gymnospermæ, p. 137. E 69512.		N					Lower Oolite, Saltwick (Nathor, p. 37).

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5	Lower Estuarine Series.		Middle Estuarine Series.		Upper Estuarine Series.			
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.	
(CRYPTOGAMIA)—cont.								
Cyclopteris, v. Gymnospermæ.	1							
Davallia?	1		i					
sp.	'						Lower Oolite, Yorksh. Coast (N	
Dichopteris, v. Pachypteris.	1	}	l				thorst).	
Dicksonia: hymenophylloides, Brong., (Sphenopteris) Hist. 1, p. 189, t. 56, f. 4; Phil., G. Y., p. 215, Lign. 34, pl. x, f. 8; Sphen. stipata, Phil., 1829; Hymenophyl- lites Phillipsii, Göpp. Syst., p. 256.	P Le						Jm.	
nephrocarpa, Bunbury, (Sphenopteris) Q. J. G. S., vol. vii., p. 179, pl. xii., f. 1.			Le				Type in Leck. Coll.	
sp.	İ			ļ			Lower Ool., Yorksh. Cosst. Allied t	
Dictyophyllum: Leckenbyl, Zigno, (Phlebopteris) t. 23, f. 1; Phil., G. Y., p. 203; Nathorst, p. 61.			P				D. concinna. Heer (Nathorst).	
Nilssoni, Brong., (Phlebopteris) Hist. I, p. 376, t. 132. f. 2; Nathorst, p. 62.							Lower Ool., Yorksh. Coast (Nathorst).	
rugosum, I. & H., t. 104; Zigno, t. 23, f. 2; Phlebopteris Phillipsii, Brong., Hist. 1, p. 377, t. 132, f. 3; t. 133, f. 1; Phil., G. Y., p. 202, Lign. 11, and pl. viii., f. 9; Phyllites nervulosus, Phil., 1829; Hemitelites heracleifolius, Göpp., p. 344.			P Le N Ym	' Le			Phil. (pl. viii., f. 9) in York Museun Jm.	
Glossopteris: Phillipsii, Brong., v. Sagenopteris (Cryptogamia, Varia), p. 128.			,					
Hemitelites: heracleifolius, Göpp,, v. Dictyophyllum rugosum.								
Hymenophyllites: denticulata, Leck., v. Sphenopteris arguta,								
Phillipsii, Göpp., v. Dicksonia hymenophylloides.	`							
Williamsonis, Leck., v. Sphenop- teris.		1						
Hymenophyllum:		and party of the second second					Lower Oolite, Yorkshire Coas	
Jeanpaulia: lindleyana, Schimp., v. Solenites furcatus (Gymnospermiæ), p. 141. Macrotæniopteris, v. Tæniopteris,		The supplication of the same					(Nathorst, p. 55).	

							,
	Lower Estuarine Series.		Estu	ldle arine ies.		per arine ies.	
. Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(CRYPTOGAMIA)—cont.							,
•							
Marzaria: Simpsoni, Phil. G. Y. p. 204, Lign. 13, 14; Y. & B., 1828, pl. 1, f. 3.		P			·		
Neuropteris: arguta, L. & H., v. Pecopteris.							
lævigata. Phil., v. Pacbypteris							
lanceolata. ligata, L. & H., v. Pec. denticulata.							
lobifolia, Phil., v. Pecopteris.	1		ı				
recentior, L. & H., v. Acrostichites Williamsonis.							
andulata. L. & H., v. Pecopteris.			ľ				
Odonto pteris: Leckenbyi, Zigno, v. Ptilozamites' (Gymnospermæ), p. 141.							
undulata. Sternb., v. Sphæno- zamites (Gymnospermæ), p. 141.							
Oleandridium: vittatum, Lebour., v. Tæniopteris.							
Otopteris:			ŀ			1 8	
acuminata. L. & H., v. Otozamites (Gymnospermæ), p. 139.							
cuneata. L. & H., v. Sagenopteris (Cryptogamia, Varia), p. 128.							
graphica. Bean, v. Otozamites.			Ī	!			
lanceolata, Bean, v. Otozamites gracilis.							
mediana, Leek., v. Otozamites.	1				1		
obtusa. L. & H., v. Otozamites.					1		
ovalis, L. & H., v. Tæniopteris.				i :			
tenuata, Bean, v. Otozamites.	1					1	
Do obyntonis I					1	1	
Pachypteris: 1 anceolata, Brong, Hist. 1, p. 168, f. 45, f. 1; Zigno, t. 14, f. 2; (Dichopteris) Phil., G. Y., p. 200, pl. x., f. 6; (Sphenopteris) Phil., 1829; P. ovata, Brong, Hist. 1, p. 168, f. 45, f. 2; Dichopteris lævigata, Zigno, t. 14, f. 3; Phil., G. Y., p. 201, pl. x., f. 9; (Neuropteris) Phil., 1829.	Р	P					
maxima, Bean, v. Otozamites medianus (Gymnospermæ), p. 139.							
ovata, Brong., v. P. lanceolata.			,				

	Estr	wer arine ries.	Estr	ddle arine ries.	Estu	per arine ries.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(CRYPTOGAMIA)—cont.							
Pecopteris: acutifolia, L. & H., t. 157, f. 2; Phil. G. Y., p. 210.			Le		P		Red Cliff.
arguta, L. & H., (Neuropteris) t. 105; l.eck., Q. J. G. S., vol. xx., p. 79, pl. x., f. 4 (non Göpp.); P. lindleyana, (Presl) Phil., G. Y., p. 209, Lign. 22.			P Le	P Le			Jm. Leck. (pl. x., f. 4) in Leck. Coll.
athyroides, Brong., v. Sphenopteris.							
cæspitosa, Phil., G. Y., p. 207, Lign. 20, and pl. viii., f. 10.	P ·		Jm Ym				Type in York Museum.
curtata, Phil., G. Y., p. 209, pl. viii., f. 12.	P		P				
curtata, Phil., G. Y., pl. x., f. 7, v. P. dentata.							
dentata, L. & R., t. 169 (non Brong.); Phil. G. Y., p. 208, Lign. 21; P. curtata, Phil., G. Y., pl. x., f. 7; P. huttoniana, Presl; ? P. Williamsonis, Phil., G. Y., p. 209, Lign. 23.	Le		P Le	P Le			Jm,
denticulata, Brong. Hist., E, p. 301, t. 98, f. 1, 2; Phil., G. Y., p. 206, Lign. 18; P. insignis, L. & H., t. 106; Phil., G. Y., p. 206, Lign. 17; (Cladophlebis) Leb. Cat.; Neuropteris ligata. L. & H., t. 69 (non Phil.).			P				Jm. L. & H. (pl. cvi.) in Leck. Coll.
exilis, Phil., G. Y., p. 210, pl. viii, f. 16 (non Bunbury); P. obtusifolia, L. & H., t. 157, f. 1; t. 158; P. Phillipsii, Brong, Hist., 1, p. 304, t. 109, f. 1; Phil., G. Y., p. 267, Lign. 19: Sphenopteris serrata, L. & H., t. 148; Pbil., G. Y., p. 210; Lign. 24; ? P. undans, L. & H.			P Le Jm				
exilis, Bunbury, v. P. polydactyka.							
haiburnensis, J., & H., t. 187; Phil., G. Y., p. 211, Lign. 25; (Cladophlebis) Leb. Cat.	P Le						
hastata, Phil., v. Asplenium whit- biense.							
huttoniana, Presl, v. P. dentata.							
inconstans, Phil., G. Y., p. 211 <i>P. lobifolia</i> , L. & H., t. 179.	P						
insignis, L. & H., v. P. denticulata.							
ligata, Phil., v. Phleb. polypc-dioides.							
lindleyana, Presl, v. P. arguta.							

		wer arine ries.	Estu	idle arine ies.	Estu	per arine ies.		
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.	
(CRYPTOGAMIA)—cont.								
Pecopteris-cont.								
lobifolia, Phil., G. Y., p. 210, pl. viii., f. 13; (Neuropteris) Phil., 1829.	Le		P Le	Le				
lobifolia, L. & H., v. P. inconstans.								
longifolia, Phil., v. Ssgenopteris Phillipsii (Cryptogamia, Varia), p. 128.								
murrayana, Brong., v. Thyrsop- teris murraysna and T. maaki- ana.								
obtusifolia, L. & H., v. P. exilis.	l		1				İ	
paucifolia, Phil., v. Sagenopteris Philipsii (Cryptogamia, Varia), p. 128).								
Phillipsii, Brong., v. P. exilis.							`	
polydactyla, Göpp.; Leck., Q. J. G. S., vol. xx., p. 80, pl. xi., f. 1; Phil., G. Y., p. 207; P. exilis, Bunbury, Q. J. G. S., vol. vii., p. 188, pl. xiii, f. 5; Alethopteris Göppertii, Ett. Abb. k. k. Geol. Reich., 1832, b. v., f. 1-7.	P Le						Jm. Leck. (pl. xi., f. 1) in Leck. Coll.	
polypodioides, Brong., and L. & H., v. Phlebopteris.								
propinqua, L. & H., v. Phlehopteris polypodioides.								
recentior, Phil., v. Acrostichites Williamsonis.								
serrata, Phil., v. P. exilis.	l]			1			
tenuis, Brong. (non later authors), v. Acrostichites.			İ					
tenuis, Auct., v. Asplenium whit- biense.					l			
undans, L. & H., t. 120; (Phle- bopteris) Brong, Hist., 1, p. 375, t. 133, f. 3; Phil., G. Y., p. 203. Lign. 12; (Pecopteris) L. & H., t. 120; (Polypodites) Göpp, Syst., p. 345; ? Pec. exitis, Phil.			P Le				Jm.	
undulata, L. & H. (Neurop- teris) t. 83; Phil. G. Y., p. 211.			P Le					
whitbiensis, Brong., v. Asplenium.		1	Jm					
Williamsonis, Brong., v. Acrosti- chites.								
Williamsonis, Phil., v. P. dentata.								
Phlebopteris :						1		
contigua, L. & H., t. 144; Phil., G. Y., p. 201.			P Le				Probably Phleb. polypodicides (Nathorst).	
crenifolia, Phil., v. P. polypodi- oides.					l		•	

	Estu	wer arino ries.	Estu	idle arine ries.	Estu	per arine ries.	
· SPECIES.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby,	REMARKS.
(CRYPTOGAMIA)—cont.				'			
Phlebopteris-cont.							
Leckenbyi, Zigno, v. Dictyophyllum			ŀ				
Lindleyi, Phil., v. P. polypodioides	.						
Nilssoni, Brong., v. Dictyophyllum							
Phillipsii, Brong., v. Dictyophyllun rugosum.							
polypodioides, Brong., Hist 1, t. 83, f. 1; Phil. G. Y., p. 201 Lign. 10; (Pecopteris) L. & H. t. 60; (Polypodites) L. eck. Q. J. G. S., vol. xx., p.76; Phleb crenifolia, Phil., G. Y., p. 202 pl. viii., f. 11; Polypodites crenifolia, Phil., G. Y., p. 202 pl. viii., f. 11; Polypodites crenifolia, Gopp., Syst., p. 343, and Zigno; Polyp. Lindleyi, Göpp. Syst., p. 342, t. 88, f. 5, 6; Phleb Lindleyi, Phil., G. Y., p. 202 Pec. propinqua, L. & H., t. 119 Phleb, propinqua, Brong., H. t. 132, f. 1; Pec. ligata, Phil. G. Y., p. 206, pl. viii., f. 14 (non L & H.); ? Phleb, contigua, L. & H.	7		P Le Ym				Alethopteris, T. & B., Yorksh. Lias, p. 26. Phil. (pl. viii., f. 11) in York Museum. L. & H. (t. 119) in Sm.
propinqua, L. & H., v. Ph. poly podioides.	-						
undans, L. & H., v. Pecopteris.							
Woodwardii, Leck., Q. J. G. S. vol. xx., p. 81, pl. viii., f. 6; Phil. G. Y., p. 202.	,		P	Le	N		Type in Leck. Coll.
Phyllites:	1		ĺ				
nervulosus, Phil., v. Dictyophyllun rugosum.	1						
Polypodites:		1					
crenifolius, Göpp.,							
Lindleyi, Göpp., v. Phl. poly-							
polypodioides,Leck.,							
undans, Zigno, v. Pecopteris.	1						
Polystichites: • murrayanus, Presl, v. Thyrsopteri	s.						
Sagenopteris, v. (Cryptogamia, Varia) p. 128.	1						
Scolopendrium: solitarium, Phil., v. Tæniopteri	3						
Sphenopterls: affinis, Phil., G. Y., p. 213, Lign							
36. arbuscuia, Phil., G. Y., p. 216 Lign. 36, 37.	, P		Jm				

	Estu	wer arine ies.	Mid Estus Ser	arine	Estu	per arine ries.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker,	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(CRYPTOGAMIA)—cont.			-	1			
Sphenopteris-cont.							
arguta, L. & H., t. 168; Sph. denticulata, Brong., Hist. 1, p. 188, t. 56, f. 1; Phil., G. Y., p. 2174 Lign. 38, 39; Hymenophyllites denticulata, Leck.	Р		P Le	Le			
athyroides, Brong., (<i>Pecopteris</i>) Hist. 1, 4, 125, f. 3; Phil., G. Y., p. 212, Lign. 27.	·	P					
crenulata, Brong., Hist. 1, t. 187, t. 56, f. 3; Phil., G. Y., p. 216, Lign. 35.	P Le						
denticulata, Brong., v. S. arguta.			1			1	
digitata, Phil., v. S. Williamsonis.	1		1				
dissocialis, Phil., G. Y., p. 214, Lign. 32.	P	P					Jm.
hymenophylloides, Brong., v. Dick- sonia.				ì			
Jugleri, Ett., Abh. k. k. Geol. Reich., t. 4, f. 5; Leck., Q. J. G. S. vol. xx., p. 79; Phil., G. Y., p. 218, Lign. 40.							Phil. (Lign. 40) in Leck. Coll.
lanceolata, Phil., v. Pachypteris.			1		1		
latifolia, Phil., v. Ginkgo Huttoni (Gymnospermæ), p. 138.							
longifolia, Phil., v. Baiera (Gymnospermæ), p. 137.					'	1	
modesta, Bean MS., v. Achrosti- chites princeps.	H			1		1	
murrayana, Phil., v. Thyrsopteris murrayana and maakiana.				í		i i	
muscoides, Phil., G. Y., p. 217, pl. x., f. 10.	P	Ym					Type in York Museum.
nephrocarpa, Bunbury, v. Dick- sonia.							
quinqueloba, Phil., G. Y., p. 215, Lign. 33.	P						
serrata, L. & H., v. Pecopteris exilis.	1						
socialis, Phil., G. Y., p. 214 Lign. 31.	P	P					
stipata. Phil., v. Dicksonia hymen ophylloides.	•						
Williamsonis, Brong., Hist. 1 p. 177, t. 49, f. 6-8; Phil., G. Y. p. 217, pl. viii., f. 6; L. & H. t. 131 Sph. digitata, Phil. 1829; (Hy menophyllites) Leck., Q. J. G. S. vol. xx., p. 76.			P Le				L. & H. (t. 131) in Sm.
spp.			1		N		Several species imperfectly preserved (Nathorst).

		wer arine	Est	ddle uarine		per uarine	
		ries.		ries.		ries.	ĺ
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(CRYPTOGAMIA)—cont. Teeniopteris: major, L.& H., t. 92; Phil., G. Y., p. 204, Lign. 15 (non pl. viii., f. 4); Aspidites Williamsonis, Göpp.; Macrotæniopteris (Leb. Cat.).			P Le	Le			Non <i>T. major</i> , Leck. Coll. See Nathorst, op. cit., pp. 62, 63.
ovalis, Sternb. 2, p. 140; Phil., G. Y., p. 205, Lign. 16; (Otop- teris) L. & H., t. 210 A.; ? Ano- mozamites lindleyanus (Gym- nospermæ).			P				L. & H. (t. 210 A) in Sm.
vittata, Brong. Hist. 1, p. 263, t. 82, f. 1-4; Phil., G. Y., p. 205, pl. viii., f. 5; Scolopendrium solitarium, Phil. 1829; (Oleandridium) Lebour, Cat.		Р	P Le N	Le			Jm.
sp.							Lower Ool., Yorksh. Coast. Near to T. tenuinervis, Brauns. (Nathorst.)
Thyrsopteris: maakiana, Heer, Flora Arctica, vol. iv., p. 31; Pecopteris murrayana, Brong, Hist. 1, p. 358, 1. 126, f. 3 and 5; (Sphenopteris) Phil., G. Y., p. 212, Lign. 26 (lower fig.).		N					The localities recorded for Th. mur- rayana probably refer partly to this species.
murrayana, Brong., (Pecopteris) Hist. 1, p. 858, t. 128, f. 1 and 4; (Sphenopteris) Phil., G. Y., p. 212. Lign. 26 (upper fig.); (Polystichites) Presl and Morris Cat.; Tympanophora racemosa, and simplex. L. & H., t. 170; Leck., Q. J. G. S., vol. xx., p. 79, pl. xi., f. 2; Coniopteris murrayana, Schimper, vol. iii., p. 471.		,	Le	Le			Leck. (pl. xi., f. 2) in Leck. Coll.
Tympanophora: racemosa, L. & H., y. Thyrsopteris simplex, L. & H.,							
"Skeletonized fern-branch." Phil.			Ym				In York Museum,
G. Y., pl. viii., f. 18. "Tree fern," Phil., G. Y., p. 219, Lign,		ı	P				Fragment of small fern rhizome, in
44. GYMNOSPERMÆ.		- 1					Oxford Museum.
Anomozamites:		- 1					
lindleyanus, Schimp., Trait. Pal. Vég., vol. 1i., p. 141; Ptero- phyllum minus and P. Nilssoni, L. & H., t. 67, f. 1, 2; Leck., Q. J. G. S., vol. xx., p. 78, pl. ix., f. 2; Phil., G. Y., p. 228; (non P. minus, Brong.); Asplemiopteris Nilssoni, Phil., G. Y., pl. viii., f. 4; Pterophyllum Nilssoni, Zigno, t. 29, f. 3; Phil., G. Y., p. 227; f. Taniopteris ovalis, Sternb.	Le		P Le Ym	Le			Tæniopteris major, Leck. Coll. (Nathoret, p. 63.) Phil. (pl. viii., f. 4) in York Museum. Leck. (pl. ix., f. 2) in Leck. Coll.
Araucaria: Phillipsii, Carr. (Araucarites) Geol. Mag., vol. vi., p. 6, pl. ii., f. 7-9; Phil. G. Y., p. 229, pl. x. f. 5	P	N					Carr. (pl. ii., f. 8) in Leck. Coll.

	Estu	wer arine ries.	Estu	idle arine ries.	Estu	per arine ies.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(Gymnospermæ)—cont. Araucarites, v. Araucaria.							
Baiera: digitata, Schimp., v. Ginkgo.							
gracilis, Bunbury, Q. J. G. S., vol. vii., p. 182, pl. xii., f. 3; Phil. G. Y., p. 199, Lign. 8.				Le?	Le	P	
longifolia, Phil. (Cyclopteris) G. Y., p. 200, pl. vii., f. 17; (Sphenopteris) Phil., 1829; Baiera Phillipsi, Nathorst, p. 76.			Le? Ym			P	Type in York Museum.
microphylla, Phil., G. Y., p. 200, Lign. 9.			P				•
Phillipsi, Nathorst., v. B. longifolia. n. sp.					,,,		Allied to D. m. Suctionians Schools
n. sp. (or Trichopitys).					N N		Allied to B. münsteriana, Schenk. (Nathorst, p. 76.) Nathorst.
Beania: gracilis, Carr. Geol. Mag., 1869, vol. vi., p. 97, pl. iv.; ? Sphæreda paradoza, L. & H., (in part) t. 159, f. 2 non f. 1; and Phillips, G. Y., p. 233.			P				Type in Bean Coll. Bm.
Brachyphyllum: mammillare, Broug. Prod., p. 109; L. & H., t. 188 & 219; Phil., G. Y., p. 229.	P Le	P	Le	Le			
setosum, Phil., G. Y., p. 229, Lign. 60.	P						
n. sp.					N		Nathorst.
Cryptomerites: divaricatus, Bunbury, Q. J. G. S., vol. vii., p. 190, pl. xiii, 7.4; Phil., G. Y., p. 230, Lign, 62.	Le		P				? Genus <i>Eutacta</i> . (Nathorst.) .
rigidus, Phil., G. Y., p. 231, Lign. 63.			Р				
Ctenis: falcata, L. & H., t. 103; Phil., G. Y., p. 218, pl. vii., f. 21; Cyca- dites sulciculis, Phil., 1829.			P Le Jm				
Leckenbyi, Bean, v. Ptilozamites.	ĺ				!		(Allied to C. braunianum, Göpp.
Ctenophyllum: sp.							(Pterophyllum) Schlesien Gesefl. Uehersicht. 1843, p. 184; (Cteno- phyllum) Schimp., vol. ii., p. 143; Lower Colite? (Nathorst, p. 71.)
Cycadites: gramineus, Bean, v. C. zamioides.							Oxford Museum.
pecten, Phil., v. Williamsonia.							

	Estu	wer arine ries.	Estu	ddle arine ries.	Up Estu Ser	per arine ries.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(GYMNOSPERMÆ)—cont.							
Cycadites-cont.	ļ			i i			
pectenoides, Phil., v. W. hastula.	ł						
sulcicaulis, Phil., v. Ctenis falcata.	ŀ				1		
zamioides , Leck., Q. J. G. S., vol. xx., p. 77, pl. viii., f. 1; Phil., G. Y., p. 228. Lign. 58; <i>C. gramineus</i> , Bean MS.		P	P				Jm. Perhaps a Conifer. Type in Leck. Coll.
Cycadopteris, v. Ptilozamites.							
Cyclopteris: Beanii, L. & H., v. Otozamites.							
digitata, Brong., v. Ginkgo.						l	
digitata, L. & H., v. Ginkgo Huttoni.							
Huttoni, Sternb., v. Ginkgo.							
longifolia, Phil., v. Baiera.	l						
Czekanowskia: Heeri, Nathorst, Öfv. k. Vet. Akad. Förh., 1880, No. 5, pp. 77, 84.			N				
rigida, Heer, Jura Flora, p. 70.					N		
setacea, Heer, Jura Flora, p. 68.	ŀ		N				
Eutacta, v. Cryptomerites.							
Flabellaria: viminea, Phil., v. Solenites mnr- rayana,							
Ginkgo:	l					Į.	
digitata, Brong., (Cyclopteris) Hist. 1, p. 219, t. 61 bis, f. 2, 3 (non Phil.); (Baiera) Schimp.; (Ginkgo), Nathorst, 1880, p. 74.			Le	Le		P N	Jm.
Huttoni, Sternb., (Cyclopteris) 5, 6, p. 66; C. digitata, L. & H., t. 64; Phil., G. Y., p. 200, pl. vii., f. 18 (non Brong.): Sphenopteris latifolia, Phil., 1829.						N Ym	Phillips (pl. vii., t. 18) in Ym.
whitbiensis, Nathorst, p. 74.		N					
n. sp.							Bean Coll., Bm. (Nathorst).
Isoetites, v. Solenites.							
Lycopodites: uncifolius, Phil., Williamsonis, Brong., V. Walchia Williamsonis.							
Wilssonia: angustifolia, Bean, MS., (Pterophyllum) Leck., Q. J. G. S., vol. xx., p. 77, pl. viii., f. 2 (non 3); Phil, G. Y., p. 227, Lign. 56.			P Le				Type in Leck, Coll.

	Estu	wer arine	Mid Estua Seri	rine	Estu	per arine ics.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker.	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(GYMNOSPERMÆ)-cont.							
Nilssonia-cont.		}					
compta, Phil., (Pterophyllum) G. Y., p. 227, pl. vii., f. 20; L. & H., t. 66; Leck., Q. J. G. S., vol. xx., p. 77, pl. ix., f. 1 (uon 3).			P Le Jm	Le	P		£Leck. (pl. ix., f. 1) in Leck. Coll.
mediana, Bean MS., (<i>Ptero-phyllum</i>) Leck., Q. J. G. S., p. 77, pl. viii., f. 3 (non 2); Phil., G. Y., p. 226, Lign. 55; Zigno, t. 29, f. 4.			P Le	N		i	Type in Leck, Coll,
tenuicaulis, Phil., (Pterophyllum) G. Y., p. 227, pl. vii., f. 19.			P Le				Type in York Mnseum. Jm.
tenuinervis, Nathorst, Ofv. k. Vet. Akad. Förh., 1880, No. 5, p. 35.			¥ш	N			
Otozamites:							
acuminatus, L. & H., (Otop- teris) t. 132; Phil., G. Y., p. 223, Lign. 50.	P Le		P				
Beanii, L. & H., (Cyclopteris) t. 44; Phil., G. Y., p. 220, Lign. 45; ? Otozamites acuminatus var. brevifolia, L. & H., t. 208.			P Le Jm?	Le			Type in Sm.
distans, Nathorst, Öfv. k. Vet. Akad. Förh., 1880, No. 5, p. 70.		N					
gracihs, Phil., G. Y., p. 224, Lign. 52; Otopteris lanceolata, Bean, MS., Leck., Q. J. G. S., vol. xx., p. 78, pl. vii., f. 4; § Y. & B., pl. ii., f. 4; § Palæo- zamia lanceolata (Y. & B., pl. iii., f. 2), Morris Cat.	P						Leck. (pl. viii., f. 4) in Leck. Coll.
gramineus, Phil., G. Y., p. 223, Lign. 51, pl. x., f. 2; Palæozamia elegans, Morris Cat.		P	Jm?				Phil. (Lign. 51) in Leck. Coll.
graphicus, Bean, MS., (Otopteris), Leck., Q. J. G. S., vol. xx., p. 78, pl. viii., f. 5; Phil., G. Y., p. 222, Lign. 49.	P Le						Type in Leck. Coll.
lanceolatus, Phil., G. Y., p. 223, pl. x., f. 3.		P Le					Jm.
<pre>latifolius, Phil., G. Y., p. 224, pl. x., f. 1.</pre>		P			l		Jm
medianus, Leck., (Otopteris) Q. J. G. S., vol. xx., p. 78, pl. x., f. 2; Pachypteris maxima, Bean, MS.							Resembles O. Beanii, See Phil. G. Y., p. 221. Type in Leck, Coll.
obtusus, L. & H., (Otopteris) t. 128; Phil., G. Y., D. 222, Lign., 48; Filicites Bucklandi, Brong, Ann. Sci. Nat., 1825, p. 422, t. 19, f. 3; "Fossil fern." De la Beche, Geol. Trans., ser. 2, vol. i., t. 7, f. 2; (Palæozamia) Morris Cat.	P Le						
parallelus, Phil., G. Y., p. 221, Lign. 47.		P					Jm.

	Estu	wer arine ries.		ldle arine ies.	Estu	per arine ies.	
Species.	Hayburn and Staintondale.	Whitby and Hawsker,	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks,
(GYMNOSPERMÆ)—cont.							
Otozamites—cont.	ŀ						
tenuatus, Bean, sp. (<i>Otopteris</i>) Leck., Q. J. G. S., vel. xx., p. 79, pl. ix., f. 3 non 1; Phil., G. Y., p. 221, Lign. 46.	P Le						Type in Leck. Coll.
n. sp.		1					Allied to O. bunburyanus, Zigno.
n. sp.] !					(Nathorst, p. 70.) Bm. (Nathorst).
Pachyphyllum, v. Walchia.			1			.	
Palæozamia: Bucklandi, Breng., v. Otozamites obtusus.							,
DUBIA, Sternb.			м?		1		
elegans, Morris, v. Otozam. gramineus.							
falcata, Merris, v. Williamsenia gigas.							
hastula, Leck., v. Williamsonia.							
lanceolata, Y. & B., v. Otozam. gracilis.							
pecten, Leck., v. Williamsonia.				1			
pectinata, Brong., v. Zamites.					l		
Podozamites:							
distans, Presl; Lebour Cat., p. 117.							Yorkshire Coast.
lanceolatus, L. & H., (Zamites) t. 194; Phil., G. Y., p. 225, Lign. 54.	P	P Le					
lanceolatus var. minor, Schenk, Flora d. Grenz., 1868, pl. 36, f. 4, and pl. 35, f. 10; Nat- herst, p. 69.							Ym. and Cm. (Nathorst).
Pterophyllum:					•		
angustifolium, Bean, v. Nilssonia.			l]		
comptum, Phil, v. Nilssonia.	1						
medianum, Bean, v. Nilssonia.			1				
minus, L. & H., v. Anomozamites					1		
Nilssoni, Zigno, lindleyanus.			l				
pecten, Phil., v. Williamsonia.			1		1		
psctinoideum, Phil., v. W. hastula.			1		1		
rigidum, Phil., G. Y., p. 228, Lign. 57.						P	Founded on undeterminable frag- ments. (Nathorst.)
tenuicaule, Phil., v. Nilssonia.					1		
Pterozamites, v. Nilssonia.	1		I		ı	l	٠

	Estu	idle arine ries.	Up Estua Ser	rine	Estu	per arine ies.	
Species.	Hayburn and Stantondale.	Whitby and Hawsker,	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
(GYMNOSPERMÆ)—cont. Ptilozamites: Leckenbyi, Bean., sp. (Ctenis) Leck., Q. J. G. S., vol. xx., p. 73, pl. x., f. 1; (Odontopteris) Zigno, Phil., G. Y., p. 218, Lign. 41; (Cycadopteris) Schimp., Pal. Vég., vol. i., p. 487; Nathorst, p. 64.			P Le				Rare. Type in Leck. Coll.
Schizolepis: sp.							Near to S. Braunii, Schenk (Nathorst, p. 88).
Solenites: furcata, L. & H., t. 209; Phil., G. Y., p. 199, Lign. 7; Jeanpaulia lindleyana, Schimp., Pal. Vég., vol. i., p. 683.	W					P	
murrayana, L. & H., t. 121; Phil., G. Y., p. 198, pl. x., f. 12; Flabellaria viminea, Phil., 1829; Isoctites, Zign.			P Le	P Le N			See remarks on this genus by Nathorst, p. 76 et seq.
Spheræda: paradoxa, L. & H., t. 159, f. 1 non 2; Phil., G. Y., p. 233, pl. viiř., f. 2, and Lign. 68.			P Le				Possibly a <i>Beania</i> . Phil. (pl. viii., f. 2) in York Museum.
PARVULA, Bean, MS.; Phil., G. V., pl. vii., f. 25.	Le		Le	Le			Too obscure to deserve naming. (Nathorst.) In York Museum, labelled S. parva.
Sphænoxamites: undulatus, Sternb., (Odontos- teris) 4, t. 28, f. 1; (Zamites) Presl, Schimp., Pal. Vég., vol. ii., p. 162.			м?				
Taxites: brevifolius, Nathorst, Öfv. k. Vet. Akad. Förh., 1880, No. 5, p. 73.		N					:
laxus, Phil., G. Y., p. 231, Lign. 64, and pl. vii., f. 24.			P				
Thuytes: expansus, Sternb., pt. 3, p. 39; t. 38, f. 1, 2; L. & H., t. 167; Phil., G. Y., p. 229, Lign. 59, and pl. x., f. 11; Buckm., Gecl. Chelt., t. 1, f. 6.		P	P				? Fertile Cryptomerites. (Nathorst.)
Walchia: Williamsonis, Brong., (Lycopodites) Prod., p. 83; L. & H., t. 93; Pinl., G. Y., p. 230, Lign. 61, and pl. viii., f. 3; Pachyphyllum, Schimp., vol. II., p. 251; L. uncifolius, Phil., 1829.			P Le	P Le			Jm.

	Estn	wer arine ios.	Estu	ddle arine ries.	Estu	per arine ies.	
SPECIES.	Hayburn and Staintondale.	Whitby and Hawsker,	Gristhorpe.	Cloughton.	White Nab.	Scalby.	Remarks.
'(GYMNOSPERMÆ)—cont.							
Williamsonia :					1		
gigas, L. & H (Zamites) t, 165; Carr., Linn: Trans., vol. xxvi., pp. 680, 693; Phil., G. Y., p. 224, Lign. 53 and pl. xxiv. "A plant," Y. & B., 1822, p. 183, pl. ii., f. 2, 6; Zamia gigas, Williamson, Linn. Trans., vol. xxvi., p. 663, pl. 52, 53; Nathorst, Ofv. k. Vet. Akad. Förh., 1880, No. 9, t. vii., f. 1-3.	r	P Le N				'	Jm.
hastula, Bean MS., (Zamites) Carr. Linn. Trans., vol. xxvi., pp. 680, 693; (Paleozamia): Leck., Q. J. G. S., vol. xx., p. 77; Ptero- phyllum pectinoideum, Phil., G. Y., p. 226, pl. x., f. 4; Cycadites pectinoides, Phil. 1829.	P	P Le					
pecten, Phil., (Pterophyllum) G. Y., p. 226, pl. vii., f. 22: L. & H., t. 102; (Cycadites) Phil., 1829; (Paleozamia) Leck., Q. J. G. S., vol. xx., p. 77, pl. ix., f. 4; (Williamsonia) Carr., Linn. Trans., vol. xxvi., pp. 680, 694, f. W. Leckenbyi, Nathorst, Ofv. k. Vet. Akad. Förh., 1880, No. 9. p. 39, pl. viii., f. 5, 6.	-		P Le N Jm	Le N	;		Leck. (pl ix., f. 4) in Leck. Coll.
Zamia :				1			
gigas, Williamson, v. Williamsonia				}			
Zamites :							
gigas, L. & H., v. Williamsonia.							
hastula, Bean, v. Williamsonia.	,						
lanceolatus, L. & H., v. Podoza- mites.							
PECTINATUS, Brong., Prod., p. 94.		M ?				ł	Palæozamia (Morris Cat.) Lebour
undulatus, Presl, v. Sphenoza- mites.	,						Cat., p. 117.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
ANIMALIA. SPONGIDA. SPONGIA: FLORICEPS, Phil., v. Tab., III. PAPILLOSA, Bean, MS.			!				Be Wr Be	c.G.	These species are merely nominal. The type of <i>Sp. flariceps</i> is unknown, nor have we been able to discover any
CŒLENTERATA (ACTINOZOA). ASTREA: DUNNII, Bean, MS. Calamophyllia: radiata, Lamx. (Eunomia), Exp. Meth., p. 88, t. 81, f. 10, 11; M. Edw., p. 111, pl. xxii., f. 1, 1 a, b, c: Tubipora or Eunomia, Phil,					P ?		Be Wr		"A unique and interesting specimen." Bean Ann. Nat. Hist., ser. 2, vol. iii. In the Scarborough Museum there is a specimen bearing this name, which is really the east of an Isastræa. Terrington.
G. Y., 1829, p. 147. Caryophyllia: convexs, Phil., v. Montlivaltia. sp. Euromia: radiata, Lamx., v. Calamophyllia. Gonioseris:							Be Wr.		
 angulata, Duncan, p. 21, pl. vii., f. 1-5. Leckenbyi, Duncan, p. 22, pl. vii., f. 6-9. sp. Duncan, p. 21, pl. vii., f. 10, 11. Isastræa: 					P 1 5 H 1 P 1 Cm.				Type in Leck. Coll. Type in Leck. Coll. In Leck, Coll. Probably young form of G. angulata.
sp. MEANDRINA, Phil., G. Y., 1829, p. 155. Montlivaltia: convexa, Phil., (Caryophyllia) G. Y., pl. xi., f. 1; M. Edw., p.			P 1				2		Cast in Scarborough Museum. Type in York Museum.
143. Sp. n. Thecosmilia: gregaria, M' Coy, (<i>Montlivaltia</i>) Ann. Nat. Hist., 1848, p. 419; M. Edw., p. 135, pl. xviii. f. 1, 1 a; Duncan, 1872, p. 18, pl. vi., f. 1-4.			Sm S 1						In Scarborough Museum. Huge discoid Montlivaltia allied to M. lens. (Fide Dunean.) Lofthouse.
TUBIPORA? ACERVALIS, Bean, MS. INCRUSTANS, Ecan, MS.,	-		S				,		Bilsdale.

		1.]	 l	ī			_	
Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	· Rémarks.
ECHINODERMATA (ECHINOIDEA).									
Acrosalenia :			s						Bils lale.
ridaris: vagans, Phil., v. Pseudodiadema.	,								
Cidarites : maxima, Münst., v. Rhabdocidaris.									
Clypens: clunicularis, Phil., v. Echinobrissus.									
Michelini, Wright, (Nucleo- lites) Ann. Nat. Hist., ser. 2, xiii., p. 161, pl. xiî., f. 6; Ool. Echin. p. 369, pl. xxx., f. 2; pl. xxvii., f. 2.					Wr. 5				Rare. Reed Çoll.
orbicularis, Phil., v. Echinobrissus.						i			
semisulcatus, Phil., v. Pygaster.									
viadema: depressum, Ag., v. Pseudodiadema.									
pentagonum, Woodward, v. Pscudo- diadema.									
vagans, Woodward, v. Pseudo- diadema.									
Diplopodia: pentagonum, M'Coy, v. Pseudodiadcma.									
Cchinites: clunicularis, Llhwyd, v. *Echino- brissus.									
Echinobrissus: clunicularis. Lihwyd, (Echinites) Lith. Brit. Ichn., p. 48; Wright, Ool. Echin., p. 232, pl. xxiv., f. 1; Clypeus clunicularis. Phil., G. Y., pl. vii., f. 2; Nucleolites latiporus. Ag. Echin. Suisse, p. 43, t. vii., f. 13-15; N. clun cularis, Forbes, Geol. Survey, Dcc. 1, pl. 9.							Re Wr. P		
orbicularis, Phil., (Clypeus) G. Y., pl. vii., f. 3; Nucleolites orbicularis, Forbes, Ge l. Survey, Dec. 1, pl. 9, p. 7; E. orbicularis, Cotteau & Triger, Echin. du Dep. de la Sarthe, p. 57, pl. ix., f. 5-8; Wright, Ool. Echin., p. 341, pl. xxv., f. 2.							Be Wr. H P 1 Jm.		
Echinus: germinans, Phil., v. Stomechinus.							S		
perlatus, Salter, v. Stomechinus germinans.									
Galeropygus: agariciformis, Desor, v. Hyboelypus.									

Species.	Pass down,	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Разв пр.	Remarks.
(ECHINOIDEA)—cont. Hemipedina: Woodwardi, Wright, Ool. Echin., p. 158, pl. xii., f. 7.							Wr.		Clays of the Cornbrash.
Wickensis, Wright. (Pseudo- diadema) (I. Echin., p. 456, pl. xlii., f. 5; (Cidaris) Phil., G. Y., pl. xi., f. 2; ? pl. ix., f. 3.		Wr. ۱ ۲۹							Fragments in the Leck, Coll. Phil. (pl. xi., f. 2) in York Museum.
Holectypus : depressus, Leske, v. Tab. III.					K		Be Wr. H 1	C.R.	
Hyboclypus: agariciformis, Forbes, Geol. Survey, Dec. iv., pl. 4; Wright, Ool. Echin., p. 292, pl. xxi., f. 1; Nucleolites decollatus, Quenst., Handb., t. 50, f. 6; Galeropygus agariciformis, Desor, Syn. Echin., p. 167.					Wr. 5 5 K ? 6		Jm		
Nucleolites: clunicularis, Forbes, v. Echiuo- brissus. decollatus, Quenst., v. Hyboolypus agariciformis.									
latiporus, Ag., v. Echinobrissus clunicularis. Michelini, Wright, v. Clypeus. orbicularis, Forbes, v. Echiuo-									
brissus.									
Psendodiadema: depressum, Ag. & Desor, (Diadema) Ann. Soi. Nat., 3 ser., t. vi., p. 346; Cotteau, Etud. Echin. Foss., p. 43, pl. 2; Wright, Ann. Nat. Hist., 2nd ser., vol. viii., p. 258, pl. 12, f. 2; Ool. Echin., p. 112, pl. vi., f. 2.						Wr	; ;		? = P. vagans, Phil. See Wright, Oo Bohin., p. 123.
pentagonum, M'Coy, (Diplopodia) Ann. Mag. Nat. Hist., ser. ii., vol. ii., p. 412; Wright, Col. Echin., p. 115, pl. vi, f. 3; Diadema pentagonum, Woodward, Geol. Survey, Dec. v., Notes to pl. ii.							Wr.		
vagans, Phil., (Cidaris) G. Y., pl. vii., f. 1; Desor, Syn. Echin., p. 65; Wright, Ool. Echin., p. 123; Diadema vagans, Woodward, Geol. Survey, Dec. v., Notes to pl. ii.					2 5	Wr P	Be Wr P		Type lost. This seems to have confrom Whitwell. See Wright, Oc. Echin., p. 123.
				1	I	l l	1		1

SPECIES.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(ECHINOIDEA)—cont. Pygaster: semisulcatus, Phil., (Clypeus) G. Y., pl. liii., f. 17; Wright, Ool. Echin., pp. 275, 463, pl. xix., f. 1, and pl. xliii., f. 6. Rhabdocidaris: maxima, Münst. (Cidarites) Goldf., Petref., p. 16, t. 39, f. 1; Desor. Syn. Echin., p. 39; Wright, Ool. Echin., pp. 55, 65, pl. xii., f. 11: Phil., G. Y., pl. ix., f. 5.		Management of the second of th	\$ 2	. :	Wr. 5 P 5 S 5 H 2 5	P Wr?		1	Spines only.
Stomechinus: bigranularis, Lam., (Echinus) Anim. sans. Vert., t. iii., p. 50; Wr., p. 210, pl. xiv., f. 3. germinans, Phil., (Echinus) G. Y., pl. iii., f. 15; Desor, Syn. Echin., p. 126; Wright, Ool. Echin., p. 204, pl. xiv., f. 1; E.	The state of the s	And the second s	1		Jm Wr.	-			
Echin., p. 126; Wright, Ool. Echin., p. 204, pl. xiv., f. 1; E. perlatus, var. germinans, Wright, Ann. Mag. Nat. Hist., ser. 2, vol. viii., p. 274, pl. 13, f. 1; E. perlatus, Salter, Geol. Survey, Dec. v., pl. 4 (non Desmarest). (ASTEROIDEA.)	and the same of th	Milled a trace . The market against again			H P 5 Jm			0	
Astropecton: Leckenbyi, Wright, Ool. Echin., 1863, p. 114, pl. vii., f. 1 a, b, c.						W r.			Single specimen in Scarboroug Museum.
scarburgensis, Wright, Ool. Echin., 1863, p. 115, pl. vii., f. 2 a, b, c. (Ophiuroidea.)	!					Wr. P			Single specimen, Leck, Coll,
Ophiolepis: Leckenbyi, Wright, Ool. Echiu., 1880, p. 160, pl. xix., f. 3 a, b.	;	*****				Wr.	,		Leck. Coll.
Murravii, Forbes, v. Tab. I., (CRINOIDEA.)	C	and the state of the state of				Wr.			Wright (pl. xix., f, 2) in Leck, Coll.
vulgaris, Schlot., Petref., p. 327. ANNELIDA. Serpula: CLAVA, Bean, MS.	:	and the second second			W	W	.Be		
depleza, Bean, v. Tab. I.	Ļ.L.	Wr. T					Wr. P	C.R.	
intestinalis, Phil., G. Y., pl. v., f. 21; L. & M., p. 121, pl. xiv., f. 7.		- '				Wr.	Be Wr. H	U.C.G.	Type, which is from the Oxford Clay is in Scarborough Museum.

Species.	Pass down.	Blea Wyke Bods.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Serpula-cont.							ĺ		N
lacerata, Phil., G. Y., pl. iv., f. 35.			i			P	P	C.G.	Type, which is from the Calc. Grit, is in Scarborough Museum.
plicatilis, Goldf., Petref., t. 68, f. 2; L. & M., p. 121, pl. xiv., f. 5 a, b. c.	L,L.					Wr.			The second of the first
QUADRATA, Phil., G. Y., 1835, p. 117.						1	P		11. St. 11. St
squamosa, Phil., G. Y., pl. iv., f.						P	Be Wr.	C.R.	
sulcata, Sow., v. Vermilia.									
tetragona, Sow., M. C., t. 509, f. 12.		Pγ			 	IP S	P	ĸ	·
Vermicularia: 500 x 4 1,000						î			
compressa, Y. & B., pl. xi., f. 25; Phil., G. Y., pl. iv., f. 17; pl. xi., f. 37; Vermetus tunidus and concinnus, Sow. M. C., t. 596, f. 4, 5.		Wr. P T						C.G.	The forms included under this genus may prove to be gasteropods. See Dr. P. Fischer, Manuel de Conch., 1887, p. 691.
nodu«, Phil., G. Y., pl. ix., f. 34; L. & M., p. 120, pl. xiv., f. 8 a, b.					P	Wr.	P Be		Vermetus of Bean's Ch. list; who also notices a reverse variety of the same
Vermilia: sulcata, Sow., (Serpula) M. C., t. 608, f. 1, 2.						Wr.			Ym.
CRUSTACEA						l a		1	
Eryma: Birdii, Bean, MS. (Astacus); (Glyphea), Wright, Q. J. G. S., xvi., pp. 4, 28; ? G. Stricklandi, Phil. (part) & Hud.		Wr. P T					Be Sm P 1 Wr 1		Clays of the Cornbrash. This species is accepted by Carter, but placed under the genus Eryma.
sp.							Yn	4	,
Estheria :		1		1					•
 concentrica, Bean. (Cypris) Mag. Nat. Hist., 1836, p. 376, f. 54; Jones, Foss. Esth., p. 101, pl. iii., f. 13-17. 				8 2	P				In the Passage beds above the Mille pore bed, Gristhorpe. In the Lower Sandst. and Shale. Cloughton and Hayburn. ? Eller Beck Bed. Type in Bm.
Glyphæa : Birdii, Bean, v. Eryma.									
PRESTWICHI, Carter, MS.			Ym						Scarborough and York Museums. May
rostrata, Phil., (Astacus) G. Y., pl. iv., f. 20; Woodward, Geol. Mag., 1868, p. 154, pl. xvii., f. 2.		Wri	1				Be Wr		be a variety of G. rostrata. Clays of the Cornbrash.
STRICKLANDI, Bean, MS. (non Phil., Thames Valley, pl. xii., f. 17).							H		The specimen figured by Phillips is not a Glyphæa. See Carter, Q. J. G. S. xlii., p. 557. Yorkshire speciments should probably be referred to Erymonia.
Terquemi, Oppel., v. Tab. I.	J						Yn	3	Birdii.
	l	I	l	1	1	1	4	i	TE 0

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Goniochirus : sp.					Ym				
Pseudoglyphæa: Etalloni, Oppel., v. Tab. I.	L.L.				5	Ym			
" A claw," Phil., G. Y., pl. v., f. 20.						1	P		
POLYZOA.								ĺ	
Diastopora ? diluviana, M. Edw., v. Tab. III.							2	C.G.	"Lower Oolite," Morris.
sp.						Be?			"Flustra," Bean, Mag. Nat. Hist 1839, and Wright, Q. J. G. S., xvi p. 28. Possibly the same as tha above. The specimens called "Tubi pora" [Tubulipora], by Bean, op cit., p. 58, are referred here.
Entalophora :									
straminea, Phil., (Spiropora and Cricopora) G. Y., pl. ix., f. 1; Vine, Brit. Assoc. Rep., 1882-8, p. 260; Q. J. G. S., vol. xl., p. 791; Nat. Hist. Soc. Northampton, 1888; (Millepora) Phil., 1829.					P1 5 6 H1 K 6 8 1 6		Be Wr.		
Hippothoa: Smithii, Phil., (Cellaria) G. Y., pl. vii., f. 8.					Jm 1		Be Wr.		Type in York Museum.
BRACHIOPODA.									
Acanthothyris: Crossi, Walker, Rep. Yorksh. Phil. Soc., 1889; (Rhynchonella) Walker, Proc. York. Nat. Clmb, 1869. p. 214; and Geol. Mag., 1870, p. 562, f. 9; Dav., Suppl., p. 223, pl. xvii., f. 17.			Ţ		Wk				Brough.
spinosa, Linn. var., B. & W., Rep. Yorksb. Phil. Soc., 1889. Rhynchonella spinosa, Phil., G. Y., pl. ix., f. 18.			P?		P 6 H 5 Wk				
Discina: annulosa, Dav., Suppl., p. 87, pl. x., f. 15, 15 a, b.							D		Type in Leck, Coll.
reflexa, Sow., v. Tab. I.	U.L.	PH	H						
Lingula :		Ŵr.						1	
Bean11, Phil., G. Y., pl. xi., f. 24; Dav., p. 9 (in part not figures); Suppl., p. 78, pl. ix., f. 10-12, 14?.		DPTWr.	H P						

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrush.	Pass up.	Remarks.
Orbicula : reflexa, Sow., v. Discina.									
Ehynchonella : Crossi, Walker, v. Acanthothyris.									
cynocephala, Richard, (Terebratula) Soc. Géol. Fr., vol. xi., p. 263, pl. iii., f. 5; Dav., p. 77, pl. xiv., f. 10-12; and Suppl., p. 204.		Wr. SH Tm	T S?						
Leedsii, Walker, MS., Dav., Suppl., p. 216, pl, xxviii., f. 17.							Wr. Wk		Prohably includes in part Rh. con- cinna. Rh. socialis, and Rh. varians of various Cornbrash lists. Type in Leck. Coll.
lineata?, Y. & B., v. Tab. I.	M.L		s				H		Fide Walker. Rh. tetrahedra, Survey Mem. 104, S.W., p. 43. This is ex-
obsoleta, Sow., (Terebratula) M.C., t. 88, f. 7, 8; Dav., p. 90, pl. xvii., f. 1-5; Suppl., p. 207, pl. xxix., f. 4.			Wr.						tremely near Rh. subdecorata. Probably Rh. subobsoleta (fide Walker).
epinosa, Linn., v. Acanthothyris.			'						
subobsoleta, Dav., p. 91, pl. xvii., f. 14; Suppl., p. 207.			Wk						
subtetrahedra, Dav., p. 95, pl. xvi., f. 9-12; Suppl., p. 200.		т				Ym 1 Wk			
tetrahedra, v. Rh. lineata, Tab. I.					ĺ	1			
sp.				8					
Terebratula :				ľ				l	
Bentleyi , Dav., p. 58, pl. xiii., f. 9-11; Suppl., p. 141.							Wk P		Rare.
cynocephala, Richard, v. Rhyn- chonella.							1		
decipiens, Desl., var. Chadwicki, Walker & Buckman.			Wk						Malton Museum. To be described by Walker and Buckman. See Proc.
globata, Sow., M. C., t. 436, f. 1; Dav., p. 54, pl. xiii, 2-7; Suppl., p. 135, pl. xvii., f. 1.					H 5 P				York. Phil. Soc., 1889.
intermedia, Sow., M. C., t. xv., f. 8; Dav., p. 52, pl. xi., f. 1-5; Suppl., p. 123, pl. xvii., f. 12.					5 P 9 5	PP	Wr.		T. intemedia, Survey Mem. Expl. of 95 N.W. See T. bisuffarcinata, Tab. III.
maxillata, var. submaxillata, Morris, Dav., p. 51, pl. ix., f. 10–12; Suppl., p. 122.		н			Wk 5 H	Wk			
obsoleta, Sow., v., Rhynchonella.						5		1	
 perovalis? Sow., M. C., t. 436, f. 2, 3; Dav., p. 51, pl. x., f. 1-6; Suppl., p. 122, pl. xvii., f. 9. 			Ħ						
punctata, Sow., v. Tab. I.	M.L		S					1	

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Corn brash.	Pass up.	Remarks.
Terebratula—cont.								r pedita	
trilineata , Y. & B., pl. viii., f. 17; Dav., p. 48, pl. viii., f. 6, 7; Suppl., p. 128, pl. xvi., f. 1, 2.		Wr. Jm H S T	P 4 S 1 3 4				Pi		
triquetra, Sow., v. Waldheimia ornithocephala.			T						
Waldheimia:								Į	a 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
bucculenta, ? Sow. v. Tab. III.		ĺ					Cm.		·
bullata, Sow., (Terebratula) M. C., f. 435, f. 4; Von Buch., Soc. Géol. Fr., vol. iii, p. 195, pl. xviii., f. 8; Zieten, Verst. Würt., t, xi., f. 6; Dav., p. 56, pl. xi., f. 19; Suppl., p. 138, pl. xvii., f. 5; also p. 187, pl. xxi., f. 21, 22.					Wk S				T. sphæroidalis in Survey Memoir 93 N.E. p. 15, is now referred here.
carinata, var. Blakei, Walker, Dav., Suppl., p. 181, pl. xxiii., f. 19, 20.		H	}					,	. 1
digona, Phil., v. W. obovata, var. siddingtonensis.							Ì		
 lagenalis, Schloth., Petref.; Von Buch., Soc. Géol. Fr., vol. iii., p. 194, pl. 18, f. 7; Dav., p. 42, pl. vii., f. 1-4, 14; Suppl., p. 168. 							Wr. H 1 P		? Variety of W. ornithocephala. The T. ornithocephala of some Corn- brash lists.
obovata, Sow. (Terebratula) M. C., t. 101, f. 5.							Le P H		/ *,r : - 1 a
obovata, Sow., var. sidding- tonensis, Walker, MS., Dav., Sup., p. 172, pl. xxii., f. 12-14; T. digona, Phil., G. Y., p. 243; Wal- ker, Proc. York. Phil. Soc., 1889.							Wk Wk 1 PP		
obovata, var. stiltonensis, Walker, Dav., Suppl., p. 172, pl. xxii., f. 17-20; Walker, Proc. York., Phil. Soc., 1889.		1.	,				Wk	¢	The T. ornithocephala var. of some Cornhrash lists. Dav. (pl. xxii., f. 20) in Leck. Coll.
ornithocephala, Sow., v. W. lagenalis.	,								1 (4)
Strangwaysi, Walk. & Buckm., Proc. York. Phil. Soc., 1889.		Wk Same							(***********************************
LAMELLIBRANCHIATA. (Monomyaria.)									And And And And And And And And And And
Anomia semistriata, Bean, v. Placun- opsis.									
Avicula:									
braamburiensis , Sow., Geol. Trans. , vol. ii., p. 323; Phil, G. Y., pl. vi., f. 6; L. & M., p. 129, t. xv., f. 6, 7.					S	Jm S 7	Be Wr. P Jm	c.G.	L. & M. (pl. xv., f 7) in Leck. Coll.
						Wr. P			

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(Monomyaria)—cont.									
Avicula—cont.		ľ							
echinata, Sow., M. C., t. 243; Smith, Strata Ident., p. 26, Cornbr. pl., f. 8; L. & M., p. 16, t. ii., f. 7, 7a; ? var. Av. tegulata, Goldf: Petref., vol., ii., p. 132, t. 121, f. 6.						S	H P	:	
inæquivalvis, Sow., v. Tab. I.	L.L.	T				S	Ве	P? ,	Occurs in the Esk Valley associated
Münsteri, Goldf., Petref., t. 118, f. 2; L. & M., p. 129, pl. xiv., f. 6.		t and they maked the	Wr. T Jm 1			L Wr.	H Jm P	a ngeniggenittaate	with Am. Murchisonæ. T. & B., Yorksh. Lias, p. 25.
ornata, Goldf., t. 121, f. 7.		Ì			1	Wr.	P		
	И.L.	ŕr	T			"1"	ī	. 1	
tegulata, Goldf., v. Av. echinata.		Wr.							
Exogyra: nana, Sow., v. Tab. III.							Wr.	к	E. mima of Bean's Cornbrash list.
Gervillia :				,			1	ŀ	
acuta , Sow., M. C., t. 510, f. 15; Phil., G. Y., pl. ix., f. 36; L. & M., p. 20, t. iii., f. 12, 12a, t. xiv., f. 1; G. lanceolata, Goldft., t. 115, f. 9; ? G. siliqua, Desl., Soc. Linn. Calv., vol. i., t. 4; G. consobrina, d'Orb., Prod. I., p. 234.	er en en en en en en en en en en en en en	1		S 1 4	82 5	H 1 5 P 1 3 S 1 2 4 5 Wr. 1 Jm 1		Kel	See Wright, Q. J. G. S., vol. xvi., p. 29. L. & M. (pl. xiv., f. 1) in Leck. Coll.
aviculoides, Sow., v. Tab. III.							Ве	C.R.	
							H	ł	
							P		
							Jm		
consobrina, d'Orb., v. G. acuta.		3			117		Wr?	5	
Hartmanni, Goldf., Petref., t. 115, f. 7; Buckm., Geol. Chelt., t. 7, f. 4.		Т	Wr. Jm		Wr.				
lanceolata, Goldf., v. G. acuta.					1				12
Iata, Phil., G. Y., pl. xi., f. 16.			Ħ	S	Wr.				Type in York Museum.
		4	P	•	P				
		1	•		Ĥ				
		'			J'n				
prælonga, Lyc., Cottesw. Hills				S	-				

	1	1 .	T	Ι	1	ī -		1	
Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbarsh.	Pass up.	Remarks.
(MONOMYARIA)—cont. Gervillia—cont. tortuosa, Sow (Gastrochæna) M. C., t. 526, f. 1; Phil., G. Y., pl. xi., f. 36; Lyc., Suppl. G. O. Moll., p. 37, pl. xl., f. 25.			Wr. Jm H	н	Jm		Ly. Wr. P		Cornbrash form is a variety. In-the Leck. Coll. Rare.
Gryphæa: dilatata, Sow., v. Tab. III. gigantea, Sow., M. C., t. 391.			P			P	Wr. P	U.C.G.	? G. bullata of Bean's Cornbrash list.
 mima, Phil., v. Exogyra nana. sublobata, Desh., Ency. Meth., ii., p. 307. sp. Phil., G. Y., pl. ix. f. 26. 					Wr.	S ₃ ?			? = G. Buckmanni, Lyc. Ann. N. H. 1853, p. 236.
Hiunites: abjectus, Phil., (Pecten) G. Y., pl. ix., f. 37; L. & M., pp. 125, 131, pl. ix., f. 7; pl. xiv., f. 8.			Wr.		Wr. 5 P 5 L 5 Jm			C.O.?	Glaizedale and Whitwell.
gradus, Bean, Mag. Nat. Hist., 1839; Lyc., Suppl. G. O. Moll., p. 35, t. xxxiii., f. 10, 10a.					5		Wr. Ly. P		In the Leck, Coll., <i>H. gradatus</i> of Dr. Wright's list, Q. J. G. S., xvi., p. 27.
tumidus, Ziet., v. Tab. I. velatus, Goldf., v. H. tumidus.	M.L.		H? T		H ₅			C.R.	
Lima: alternicosta, Buvig., v. L. duplicata. bellula, L. & M., p. 30, t. iii., f. 9.								,	
cardiformis, Sow., (Plagios-			P		H 5 Wr.	P		,	
toma) M. C., t. 113, f. 3; I. & M., p. 27, t. iii., f. 2, 2a. dupHeata , Sow., (<i>Plagiostoma</i>) M. C., t. 559, f. 3; Phil., G. Y., pl. vi., f. 2; I. & M., p. 26, t. iii., f. 6, 6a; f. P. pectrinoides, Eict. Würt., p. 92, t. 69, f. 2; L. alternicosta, Buvig., Géol. de la Meuse, p. 22, t. 18, f. 11-13.			1		Wr. 1 5 P	Wr.	Wr. H P	c.o.	? Limea duplicata of Wright, Q. J. G. S., rvi., p. 33. Phil. (pl. vi., f. 2) in York Museum.
educta, Whidborne, Q. J. G. S., vo., xxxix., p. 506, pl. xvii., f. 4; Avicula multicosta, Bean (non Geinitz).	1			!	1	9		ı	•
electra 7, d'Orb., Prod. I., p. 255. gibbosa, Goldf., v. I. helvetica.			3						Survey Mem. 96, N.W., p. 30.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrush.	Pass up.	Remarks.
(Monomyaria)—cont.						1			
Lima-cont.									
helvetica, Oppel. Jura., p. 489; Lima gibbosa, var. Sow., M. C., t. 182 (non Goldf.); Lyc., (in part) Suppl. G. O. Moll., p. 41, t. xxxiii., f. 8, 8a.							Be Wr. P 1 Jm		"L. gibbosa, Sow. (var. with intermediate costæ)," Wright, Q. J. G. S., xvi., p. 27. Lyo. (pl. xxxiii., f. 8) in Leck. Coll.
impressa, L. & M., p. 29, t. iii., f. 8, 8a.							H		
interstincta, Phil., G. Y., pl. vii., f. 14.					P		Be P		
pectiniformis, Schloth., (Ostracites) Petref., p. 231; Bronn., Leth. Geog., p. 214, t. 19, f. 9, 10; L. & M., p. 26, t. vi., f. 9, and Suppl., p. 39, t. xxvi, f. 1; Ostrea pectiniformis, Ziet., Würt., p. 62, t. 47, f. 1; L. proboscidea, Sow., M. C., t. 264; Goldf., Petref., p. 88, t. 103, f. 2.			P		Wr. 5 K 6	Jm 1	P	C.R.	
psctinoides, Ziet., v. L. duplicata.									
proboscidea, Sow., v. L. pectiniformis.									
punctata, Sow., v. Tab. I.	L.L.				8	P	S		
rigidula, Phil., G. Y., pl. vii., f. 13; Lyc. Suppl., p. 42, t. xxxiii., f. 7, 7a.							Be Wr. H Le S 5 P 1 Jm		Abundant. Lycett (pl. xxxiii., f. 7) in Jm.
rudis, Sow., v. Tab. III.								C.R.	
sulcata, Goldf., Petref., 2, p. 84, t. 102, f. 4.							Wr.		In Cornbrash clays.
toarcensis, Desl., v. Tab. I.	Jn		T						
Monotis, v. Avicula.			4						
Ostracites:		Į,							
isognomoides, Stahl, v. Perna.	ł	N.							•
pectiniformis, Schlotb., v. Lima.		8					١.		1
Ostrea:		-		İ				th:	
acuminata, Sow., v. O. Sowerbyi.								, ,	
diluviana, Park., v. O. flabelloides.									
#abelloides, Lam, Anim. sans Vert., vi., p. 215; Knorr, Petref., Bd. 2. 1. pl. 66 (D. 1*), f. 3; Ency. pl. 185, f. 6-9; O. Marshii, Sow., M. C., t. 49; Goldf., Petref., t. 73; L. & M., p. 126, t. xiv., f. 2, 2a; O. diluviana, Park., Org. Rem., 3, t. 15, f. 1; Zieten, Petref., t. 46, f. 1; O sulvifera, Phil., G. Y., pl.			T 1		Wr. P	Wr.	Wr. P	C.G.	Very abundant. O. sulcifera is from the Oolite of Whitwell. Phillips describes this last as the young of O solitaria. L. & M. (pl. xiv., f. 2) in Leck. Coll.

Species,	Pass down.	Blea Wyke Beds.	Dogger,	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(Monomyaria)—cont. Ostrea—cont. gregaria 1, Sow., v. Tab. III. Marshii, Sow., v. O. flabelloides.			83	S 5				C.R.	
Meadii, Sow., M. C., t. 252, f. 1, 4. pectiniformis, Ziet., v. Lima.							Be Wr. P		
 pulligera, Goldf., v. O. solitaria. solitaria, Sow., M. C., t. 468; O. pulligera, Goldf., Petref., t. 72, f. 11. 			Wr. Jm				Wr.	C.R.	
Sowerby1, L. & M., p. 4, t. 1, f. 3, 3a; O. acuminata, Sow., M. C., t. 185, f. 3 (uon 2).			P T						At the base of the Oolite, Castleton. T. & B., Yorksh. Lias, p. 25.
epatiosa, Bean, MS. sulcifera, Phil., v. O. flabelloides.			Wr.				Be Wr. Ym		O. spetiosa, Wright, Q. J. G. S., vol. xvi., p. 15. A large flat species in the York Museum.
Pecten: anisopleurus, Buvig., Géol. de la Meuse, p. 23, pl. xix., f. 31-35; Lyc., Suppl. G. O. Moll., p. 34, t. xxxiii., f. 5, 5a.							Ly Jm H P		Leck. Coll. P., fbrosus of Bean's Cb. list. (Fide Leck.)
annulatus, Sow., v. P. lens. aratus, Waagen, Benecke's Geogn. pal. Beitr., t. 81, f. 4. arcuatus, Sow., M. C., t. 205, f. 5-7; P. Goldf., Petref., p. 50,			Wr.		H? 5 P 1		Be Wr.	Kel	
t. 91, f. 6; L. & M., p. 11, t. 1, f. 18. articulatus, Schloth., Petref., p. 227; Goldf., Petref., p. 47, t. 90, f. 10; Lyc., Suppl., p. 32, t. xxxiii., f. 12; P. vimineus, Sow., M. C., t. 543, f. 1, 2; Goldf., Petref., t. 89, f. 7; P. varius, Y. & B., 1822, t. 9, f. 9.			Ţ		Jm S		H P	U.C.G	Lyc. (pl. xxxiii., f. 12) in Leck. Coll.
cancellatus, Bean, v. P. intertextus.									
cingulatus, Goldf., Petref., t. 99, f. 8; Phil., G. Y., pl. v., f. 11.							P		
clathratus, Röm., Verst. Ool., t. 13, f. 9; L. & M., p. 18, t. 1, f. 19, 19a.					8	H S 1			:
demissus, Phil., G. Y., pl. vi., f. 5; L. & M., p. 127, t. xiv., f. 7; Goldf., Petref., p. 74, t. 99, f. 2; P. elimatus, Bean, MS.			8		Wr. P	Wr. Jm	Be Wr. H Le	U.C.G.	L. & M. (pl. xiv., f. 7) in Leck. Coll.
disciformis, Schüb., v. Tab. I. elimatus, Bean, v. P. demissus.	Ju		Ţ				J _m		

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepere Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(Monomyaria)—cont. Pecten—cont. FLEMINGII, Brown. inæquicostatus, Phil., v. Tab. III.							Be Wr. H		"Gr. O. Malton" (Morris).? Melton, See Foss, Conch., p. 153. Rare in the Cornbrash.
INTEECOSTATUS, Wright, MS. intertextus, Röm., v. Tab. III.		Wr.					Wr.	C.R.	See Q. J. G. S., vol. xvi., p. 4. P. michaelensis of Combrash lists.
lens, Sow., M. C., t. 205, f. 2, 3; Goldf., Petref., p. 49, t. 91, f. 3; Ziet., Würt., p. 69, t. 52, f. 6; d'Orb., in Murch. Russia, ii., p. 476, t. 42, f. 1, 2; Bronn, Letb. Geog., p. 206, t. 19, f. 7; L. & M., p. 11, t. ii., f. 1, la; f. P. annulatus, Sow., M. C., t. 542, f. 1; Goldf., Petref., p. 49, t. 91, f. 2.			P 1 T 1 +	H?	S	P 1 Jm 1 S 1 2 4 5 H 1 5	Jm 1 Wr. Jm 1 P 1	U.C.G.	
michaelensis, Buvig., v. P. intertextus. NEEVOSUS, Bean, MS. octocostatus, Röm., v. P. inæquivaivis. paradoxus, Goldf., Petref., 2, p. 74, pl. 99, f. 4. personatus, Goldf., Petref., p. 75, t. 99, f. 5; L. & M., p. 11, t. 1, f. 17.		s	Υm		H ₅ S	825	100		
saturnus, d'Orb., Prod. I., p. 284. sileuus, d'Orb., Prod. I., p. 284. subfibrosus, d'Orb., v. Tab. III. vagaus, Sow., v. Tab. III.		т	,		Wr 1 5		Pr 1 Be Wr	c.o. v.c.g.	
vimineus, Sow., v. P. articulatus. virguliferus, Phil., G. Y., pl. xi., f. 20. wickensis, Wright, MS.		Wr.	P				-		Q. J. G. S., vol. xvi., p. 4.
Perna: isognomoides, Stahl. (Ostracites) Würt. Landw. Corresp. Bl., vol. vi., p. 66, t. vii., f. 35. mytiloides, Lam., v. Tab. III. obliqua, Walton, Lyc., Suppl. G. O. Moll., p. 112, t. xxxiv., f. 2, 2a.			T 1			Wr.	P	U.C.G.	

					,		1		
Species.	Pass down,	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarus.
(MONOMYARIA)—cont.									
Perna—cont. rugosa, Goldt., Petref., t. 108, f. 2; P. quadrata, Phil., G. Y., pl. ix., f. 21, 22; P. rugosa, var. L. & M., p. 25, t. iii., f. 1; p. 128, t. xiv., f. 16.						Jm S Wr.	Cm.	C.R.	L. & M. (pl. xiv., f. 16) in Leck. Coll.
Pinna: ampla, Sow., (Mytilus) M. C., t. 7; Goldf., Petref., t. 129, f. 1; L. & M., p. 31, t. iv., f. 14.		P?				5			Inf. Ool., Blue Wick.
cancellata, Bean, MS., L. & M., p. 130, t. xiii., f. 20 a, b.					Wr.	L 1 P			Type in Bean Coll. Bm.
cuneata , Bran, MS., Phil., G. Y., pl. ix., f. 17; L. & M., p. 32, t. vi., f. 11.		Т		85.4	Wr. 5 H 1 8 5 P 6	Wr. 1 Jmi H 1 S	Be Wr.		
lanceolata, Sow., v. Tab. III.					Ħ	P	Be H 1 P	C.G.	
Placunopsis: GRANULATUS, Bean, MS. (Ostrea) Mag. Nat. Hist., 1839, vol. iii., p. 61.						Be ?	Jm Wr.		Murray Coll.
inæqualis, Phil., v. Tab. III.						Wr.	P 1 Jm	C.R.	
semistriatus, Bean (Anomia) Mag. Nat. Hist., 1839, p. 61, f. 21; Lyc., Suppl. G. O. Moll., p. 30, t. xxxiii., f. 9, 9a.		Ì					Ly P		Rare. Type in Bm.; Lyc. (pl. xxxiii. f. 9) in Jm.
Plagiostoma, v. Lima.		,					Jm 1		
Pteroperna : plana, L. & M., p. 128, t. xiv., f. 4.			Wr.		Wr.	L P H			Type in Leck. Coll.
					į	Wr. Jm			
STRIATA, Bean, MS.			Wr.			1			
Trichites:			î				Wr. P	j	Inoceramus of Bean's Cb. list.

• Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	REMARKS.
LAMELLIBRANCHIATA. (DIMYARIA). Amphidesma, v. Myacites.								Tourish difference	
Anatina: parvula?, Bean, (Sanguinolaria) Mag. Nat. Hist., 1889, p. 59, f. 18.							Be Wr.	O .C.	Clays of the Cornbrash. Very rare See vol. i., p. 263, note.
plicatella, L. & M., p. 118, t. xi., f. 4 non 6.							Wr.	th see a	
siliqua Ag., (Cercomya) Etud. Crit. Myes, p. 148, t. 11 a, f. 9-13; Lyc., Suppl., p. 83, t. xxxv., f. 15; Sanguinolaria undulata, Phil., G. Y., pl. v., f. 1 (non Sow.); Quenst., Jura, t. 68, f. 9; Anatina undulata, Leck., Q. J. G. S., xv., p. 8.							Be Wr. P	C.O.	Probably includes Anatina undulut (Sow.), given by Wright and Phillip in the Cornbrash. Lyc. (pl. xxxv., f. 15) in Leck, Coll.
Anodon: Insperatus, Phil., MS. (Unio).									Upper Est. Ser. White Nab; Lowe Est. Ser. Hayburn. This is place under the genus Anodon on the authority of Hudleston, Proc. Geo
Arca: clathrata, Leck., corallina, Damon, v. Cucullæa.			4						Assoc., iii., p. 318.
Eudesii, L. & M., p. 46, t. v., f. 6, 6a.		Age allow-				S			
triangularis, d'Orb., v. Sowerbya.									
Arcomya: sinistra, Ag., v. Myacites.									
Astarte: complanata, Röm., v. A. excavata.									
elegans, Sow., M. C., t. 187, f. 3; Phil., G. Y., pl. xi., f. 41; Goldf. Petref., t. 184, f. 12; Zieten, Würt., t. 61, f. 4; L. & M., p. 86, t. xiv., f. 14.			Wr S 1 H 1 P 1 Jn		Cm	WI S	l P		"C.O. Malton" (L. & M., p. 87). L. & M. (pl. xiv., f. 14) in Leck. Coll.
excavata Sow, M. C., t. 233; L. & M., p. 85, t. ix., f. 18, 19; A. complanata, Röm., Verst. Ool., t. vi., f. 28.			Wi						
extensa, Phil., G. Y., pl. iii., f. 21.							Be Wr		
Leckenby1, Wright, Lyc., Suppl., p. 74, t. xlii. f. 3.							Wr P 1 Jm		Type in Jm.
lurida, Phil., v. A. ungulata.							4,		

Species,	Pass down.	Blea Wyke Beds.	Dogger,	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash,	Pass up.	REMARKS.
(DIMYARIA)—cont. Astarte—cont. minima Phil., G. Y., pl. ix. f. 23; L. & M., p. 134, pl. xiv., f. 15; ? A. pulla. Rôm., Verst. Ool., t. vi., f. 27.			Wr.	S 1 4	Wr P 1 Jm	S L 2 P	. Be	Kel	? = A. striato-sulcata, Rom.
paupertina, Bean, MS.; Astarte sp. Phil., G. Y., pl. xi., f. 10, 11.			Ym			3		,	Type in York Museum.
politula, Bean, Mag. Nat. Hist., 1839; Lyc., Suppl., G. O. Moll., p. 73, t. xxxv., f. 16.					•		Be Wr. Ly P	Kel	Leck. Coll.
recondita, Phil., (Pullastra) G. Y., pl. ix., f. 13; L. & M., p. 88, t. xii., f. 19.					Wr. P	P	J _m	Saddillipor veto .	Type in York Museum.
robusta, Lyc., Suppl. G. O. Moll., p. 74. t. xxxv., f. 6, 6a.					1		Ly P	Kel	Leck. Coll. Rare.
rotundata, Bean, v. Lucina Beanii. ungulata, Lyc., Suppl., p. 72, t. xxxv., f. 20; A. lurida, Phil., G. Y., pl. v., f. 2, (non Sow.).							Be Wr? Ly Jm	ю.с.	iLeck. Coll.
sp. n. Cardinia :							P Wr.		"A small thick sulcate shell resembling a sp. from the Kell. of Wilts." Q. J. G. S., xvi., p. 27.
abducta, Morris, v. Gresslya. humata?, Brown(Unio) Conch., p. 179, pl. 1xxii*, f. 18; Pachyo- don hamata, Brown, Ann. Mag. Nat. Hist., 1813, vol. xii., p. 395, pl. xvi*, f. 6; Cardinia hamata, Morris, Cat., 1854, p. 190.					P	-			Unio humatus non hamatus, (the buried Unio). There is some doub on what horizon this apecies wa found. In the Annals it is stated to occur in the Oxford Clay, but in the Conchology it is given from the "Conshale" of Gristhorpe Bay.
vetusta? Brown, (Pachyodon) Ann. Nat. Hist., 12, t. 16*, f. 7; (Cardinia) Morris, Cat., 1854, p. 190.					?				"O. Sh., Gristhorpe Bay" (Morris).
Cardita: producta, Sow., v. Pholadomya. similis. Sow., v. Opis. Cardium: acutangulum, Phil., v. Cypricardia cordiformis. Beaumontii, d'Orb., v. Cypricardia rostrata.									
Buckmani, L. & M., p. 64, t. vii., f. 2; C. lævigatum, Lyc., Ann. Nat. Hist., 1850, p. 422.					Wr. H				

,	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Combrash	Pass up.	Remarks.
۱.							Be Wr. P	Kel	Type in York Museum.
,						P	Be Wr. H P	Kel	Type in York MuseumLyo. (pl. xxxvi., f. 3) Leck. (pl. iii., f. 8)
			wr.				1	' '	
		Ym 4	Wr.						Type in York Museum.
ž.			1				Be Wr. Ly I		Type in Leck. Coll.
., i,			Wr.				1		Type in York Museum.
							Be Wr.		In the Clays of the Cornbrash. Ver rare. See vol., i., p. 263, note.
). t.				S			1		Allied to C. cognatum, Phil.
3.	•						Wr.	c.o.	
ı.				S		Wr	1		Type in York Museum.
6,						•	Wr Ly H		From the following MS. note in Sca borough Museum it appears the Dr. Lycett considered the Yorkshi
		l					P		examples of this shell to be a Ca- dium:—"I have ascertained from good Scarborough examples that th
3.		,	Wr		Wr.		1		shell [I. minima] is a Cardium, should be called C. Sowerbyi."
,			H 1 P		P 1				Phil. (pl. xi., f. 7) in York Museum.
			T						
p. 2, 11			S H T P		1 5 H 1 5 Jm S				
). t. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	Ym 4 5 7 7 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Wr. 1 P1 Wr. 1 P1 1	Wr. Wr. Pr. Wr. Pr. Wr. S. S. S. S. Wr. S. H. T.	Wr. Wr. P?	Ym Wr. 1 P? 1 Wr. 1 P? 1 X Wr. 1 P? 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 1 P 1 X Wr. 2 P 1 X Wr. 3 P 1 X Wr. 4 P 1 X Wr. 4 P 1 X Wr. 5 P 1 X Wr. 5 P 1 X Wr. 6 P 1 X Wr. 6 P 1 X Wr. 6 P 1 X Wr. 6 P 1 X Wr. 7 P 1 X Wr. 8 P 1 X Wr. 8 P 1 X Wr. 8 P 1 X Wr. 9 P 1 X W	Be Wr. Wr. Wr. Wr. P Wr. S. Wr. P 1 Be Wr. Lly P 1 Wr. S. Wr. P 1 Be Wr. Lly P 1 Wr. S. Wr. P 1 Be Wr. Lly P 1 Be Wr. Lly P 1 Be Wr. Lly P 1 Be Wr. Lly P 1 Be Wr. Lly P 1 Jm Be P 1 Jm S H 1 Jm S H 1 Jm S Jm S S S S S S S S S S S S S S S S S S S	Be Kel Wr. P Be Kel Wr. P Be Wr. P Be Wr. P I Wr. P I Be Wr. P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. P I Be Wr. Ly P I Be Wr. Ly P I Be Wr. Ly I Be Wr. Ly I Be Wr. Ly I Be Wr. Ly I Be Kel Wr. P I I Jm I Be Kel Wr. P I Jm I Be Kel Wr. P I I Jm I Jm I Be Kel Wr. P I Jm I Jm I Be Kel Wr. P I Jm I Jm I Be Kel Wr. P I Jm I Jm I Be Kel Wr. P I Jm I Jm I Jm I Jm I Jm I Jm I Jm I Jm I Be Kel Wr. Ly I Jm

Species.	Pass down.	Blea Wyke Beds.	Pogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone,	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Ceromya—cont.									,
tenera, Ag., v. Isocardia. Corbicella: ovalis, Phil., (Corbis) G. Y., pl. v., f. 29.							Be Wr.	o.c.	Type in York Museum.
subæquilatera, Lyc., Cottesw. Hills Handb., p. 126; Lyc., Suppl. G. O. Moll., p. 69, t. xxxv., f. 12; Corbis lucida, Bean, MS.							P P 1 Wr. Be		Type in Leck. Coll.
Corbis: elliptica, Lyc Suppl. G. O. Moll., p. 60, t. xxxv., f. 1.				8					
lucida, Bean, v. Corbicella sub- æquilatera.									
ovalis, Phil., v. Corbicella.		l							
Corbula : depressa, Phil., v. Unicardium.									
DUBIOSA, Bean, MS.			Wr.						? Corbicella.
involuta, Münst., Goldf., Petref. 2, p. 250, pl. 151, f. 14.				S					
Cucullæa : ABRUPTA, Bean, MS.							Wr.		
cancellata, Phil., G. Y., pl. ix., f. 24; pl. xi., f. 44; L. & M., p. 132, t. xiv., f. 12; C. obliqua, Lyc., Ann. Nat. Hist., 1850.		T	Wr. T		Н?	L H Wr.	Be Wr. P		Type (pl. xi., f. 44) in York Museum. Lyc. (pl. xiv., f. 12) in Leck. Coll.
			1 P 1			Jm			
						S			
clathrata, Leck., v. Tab. III.							Wr.	Kel	
concin 1a, Phil., G. Y., pl. v., f. 9, Goldf., Petref., t. 123, 1. 6?; L. & M., p. 50, t. v., f. 7; ? C. sublewi- gata, Ziet., Würt., p. 75, t. 56, f. 3.							P P P	C.O.	Type in York Museum,
corallina, Damon, v. Tab. III.						:	Ly P?	c.o.	The Cornbrash form figured by Lycet may be a variety.
eylindrica, Pbil., G. Y., pl. ix., f. 20.		i				P			
elongata, Sow., M. C., t. 449, f. 1; ? Phil., G. Y., pl. iii., f. 33.					P	Jm S			
elongata, Phil., G. Y., pl. xi., f. 43, v. Macrodon hirsonensis.	Į								
imperialis, Bean, Phil., G. Y., pl. ix., f. 19.	j					P			Type in York Museum.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
† (DIMYARIA)—cont. Guculisea—cont. obliqua, Lyc., v. C. cancellata. PROXIMA, Bean, MS. reticulata, Bean, Phil., G. Y., pl. xi., f. 18. sublævigata, Ziet., v. C. concinna.			Wr. 1 P 1 Jm 1			Wr.	Wr.		Type in York Museum.
triangularis, Phil., v. Sowerbya. Cypricardia: bathonica, d'Orb., Prod. I., p. 308; L. & M., p. 75, t. vii., f. 8, 8a, b, c. cordiformis, Desh., Traité Elem. Conch., 2, t. 24, f. 12, 13: Cardium acutangulum, Phil., G. Y., pl. xi., f. 6.			Wr. P T T H J m		H Wr.				Phìl. (pl. xi., f. 6) in York Museum.
rostrata, Sow. (Isocardia) M. C., t. 295, f. 3; Goldf., Petref., p. 210, t. 140, f. 12; L. & M., p. 75, t. vii., f. 9, 9a, b; f Cardium Beaumontii, d'Arch., Soc. Géol. de Fr. v., t. 26, f. 4.			P				Jm		
Cyprina: spp. Cytherea: dolabra (Cyprina?), Pbil., G. Y., pl. ix., f. 12; L. & M., p. 135, t. xiii., f. 19. PLANA, Bean, MS. Gonlomya: angulifera, Sow., (Mya) M. C.,		Wr.	Wr.	S		Wr.			Tyre in York Museum.
t. 224, f. 6, 7; Goldi., Petref., p. 262, t. 154, f. 5, 10. literata, Sow., (Mya) M. C., t. 224, f. 1; Ag., Etud. Crit., p. 18, t. 1b, f. 13-16; Phil., G. Y., pl. vi., f. 5?; L. & M., p. 119, t. xi., f. 3; Lysianassa literata, Goldf., Petref., t. 154, f. 8. sulcata, Ag., Etud. Crit., p. 7, t. 1, f. 8, 9; 1b, f. 9-12; 1c, f. 13-14. v-scripta, Sow., (Mya) M. C., t. 224, f. 2-5; Goldf., Petref., p. 262, t. 154, f. 6; Ag., Etud. Crit., t. 1b, f. 17-19; L. & M., p. 140, t. xiii, f. 16.		T	T		Wr.		H Jm	U.C.G.	

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Gresslya: abducta, Phil., (Unio) G. Y., pl. xi., f. 42; G. latior, Ag., Etud. Crit., t. 12b, f. 10, 11; Cardinia, Morris Cat.	Ju	l.	Wr. T H P		Wr 1 P		P		
concentrica, Ag., v. G. peregrina. donaciformis, Phil., v. Tab. I. erycina, Ag., v. G. peregrina.	r.ı	ß	1						
latior, Ag., v. G. abducta. peregrina, Phil., (Unio) G. Y., pl. vii., f. 12; L. & M., p. 139, t. xv., f. 8a, b; Lyc., Suppl., p. 79, f. xxxvi, f. 2, 2a, b; G. erycina, Ag., Etud. Crit., p. 21s, t. 14, f. 1- 9; G. concentrica, Ag., p. 213, t. 14. f. 10-15.		Т				Wr. 1 P 1 H 1 S?	Be Wr. H	:	Closely allied to G. abducta.
pinguis, Ag., Étud. Crit., p. 217, t. 13c, f. 1-6.		T					P	,	Allied to G rotundata.
Seebachii, Brauns. (Pholado- mya obliquata, Phil.), v. Tab. I.	ML	Wr?		ı	ĺ	١.,			
Homomya: crassiuscula, I. & M. (Myactes), p. 112, t. ix., f. 3; Lyc., Suppl. G. O. Moll., p. 89, t. xliii., f. 5, 5a.		21 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				Wr.	Wr. Ly S?	C.R.	:
gibbosa, Sow. (Panopæa), M. C., t. 211; (Mya) d'Arch., Mém. Soc. Géol. Fr. v., pl. 26, f. 1; (Mya- cites) L. & M., p. 138, t. xii., f. 14; (Homomya) Lyc., Suppl. G. O. Moll., p. 88, t. xiii., f. 2, 2a.				;		Ļ	P 1	¢	
Isoarca: scarburgensis, Lyc., Suppl.							Ly		Leck, Coll.
G. O. Moll., p. 45, t. xxxix., f. 5, 5a.							P 1 Jm		
concentrica, Phil., v. Ceromya ba- jociana.									
cordata, Buck., Geol. Chelt., p. 98. t. 7, f. 1; L. & M., p. 135, t. xv., f. 5.			Wr.		P H 5 Jm	L Wr.			L. & M. (pl. xv., f. 5) in Leck. Coll.
minima, Sow., M. C., t. 295, f. 1; Phit., G. Y., pl. vii., f. 6; I. tenera, L. & M., p. 66, pl. vii., f. 1; Lya., Suppl., p. 57, pl. 88, f. 5; Phil., G. Y., pl. iv., f. 25; I. tumida, Phil., 1829.					S		Be H ? 1 Jm	c.G.	Non I. minima. Lyc. Suppl., p. 56, pl. xxxvi., f. 1, 1a. See Cardium Sowerbyi. Lyc. (pl. xxxviii., f. 5) in Leck. Coll.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Beds.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont.									
Isocardia—cont. ntida, Phil., G. Y., pl. ix., f. 10; ? Lyc., Suppl., p. 87, t. xxxv., f. 10; I. triangularis, Bean, Mag. Nat. Hist., 1839, p. 60, f. 20.						Wr 1 H:	Wr. Ly H	.i	Opis triangularis, Wright, Q. J. G. S. vol. xvi., p. 26. Type in York Museum.
rostrata, Sow., v. Cypricardia.				,			P	ľ	
tenera, Sow. M. C., t. 295, f. 2; Desh., Traité Elem. de Conch., îi., p. 27, t. 24, f. 6, 7; I. nitida, Lyc., Suppl., p. 57, t. xxxviii., f. 6; (non I. tenera, L. & M., p. 66, t. 7, f. 1).							Ly Wr. P		Some of these determinations should possibly go under <i>I. minima</i> .
triangularis, Bean, v. I. nitida.		l	1						
tumida, Phil., v. I. minima.		ŀ							
Leda: acasta, d'Orb., v. L. lachryma.									
æquilatera, K. & D., v. Tab. I.	Ju	T							
anglica, d'Orb., Prod. I., p. 275; Lyc., Suppl., p. 45, t. xxxix., f. 7; Nucula lachryma, Phil., G. Y., pl. ix., f. 25.			P	:		P	Ly P		Lyc. (pl. xxxix., f. 7) in Leck. Coll.
lachryma, Sow. (Nucula) M. C., t. 476, f. 3; Phil., G. Y., pl. xi., f. 14; Goldf., Petref., t. 125, f. 10; L. & M., p. 53, t. v., f. 15, 15a; Nucula cordata, Kock and Dun- ker, Beit. Nord. Ool., p. 31, t. 2, f. 7; P. Leda acasta, d'Orb., Prod. 1., p. 275.			Wr.	S			Re Wr.		Phil. (pl. xi., f. 14), which is in York Museum, is not <i>Leda anglica</i> , d'Orb
rostralis, Lam., Anim. sans Vert., 6, p. 59.			Ţ						
variabilis, Sow., v. Nucula.									
Lucina									
Beanti, Lyc., Suppl., p. 59, t. xxviii., f. 3; Astarte rotundata, Bean, Mag. Nat. Hist., 1839 (non Röm.); ? L. globosa, Buvig., Géol. de la Meuse, p. 12, pl. xii., f. 35-38.							Be Ly 1 P	C.O.	Leck, Coll,
bellona, d'Orb., Prod. I., p. 309 ; L. & M., p. 67, t. vi., f. 18, 18a; <i>L. lirata</i> , var. <i>transversa</i> , d'Arch., Mém. Soc. Géol. Fr. v., t. 26, f. 3.					85		P I Jm	C.G.	
crassa , Sow., var. M. C., t. 557, f. 3; L. & M., p. 68, t. vi., f. 13.							Wr. P	Kel	
despecta, Phil., G. Y., pl. ix., f. 8; L. & M., p. 69, t. vi., f. 16, 17.			P			Wr.	Be Wr. P		Type in York Museum.
lirata, var. transversa, d'Arch., v. L. bellona.							Jm		
Lutraria, v. Myacites.			- }				1		

Spécies.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Beds.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Lysianassa: literata, Goldf., v. Goniomys. Macrodon: hirsonensis, d'Arch., (Cucullæa) Mém. Soc. Géol. Fr. 1843.			Wr.						Phil. (pl. xi., f. 43) in York Museum.
hirsonensis, d'Arch., (Cucul- læa) Mém. Soc. Géol. Fr., 1843, p. 374, pl. 27, f. 5; C. elongata, Phil., G. Y., pl. xi., f. 43.			H P						
VETERUM, Phil., MS., G. Y., p. 254. Macromya:			P?						Inf. Ool. Glaizedale.
globosum, Ag., v. Unicardium.									
aspera, Phil., v. M. furcats. bipartita, Sow., v. Tah. III.					,		Ве	ΚP	
							Wr. P Jm		
cuneata, Sow., v. Tab. III.			Wr. H 1 T?		Wr.	Wr.	Be Wr. H P 1 Jm	c.o.	,
furcata?, Goldf., (Mytilus) Petref., t. 129, f. 6; Röm., Verst. Ool., p. 33, t. 18, f. 38; Modiola aspera, Phil, G. Y., pl., xi, f. 9; Mytilus furcatus, var. batho- nicus, L. & M., p. 39, t. i.v., f. 9, 9a; M. furcata, Phill, 1875.			Wr. Sm 1 Jm				1		M. aspera, Phil., is referred with dou by L. & M. to M. furcata, Goldf. Phil. (pl. xi., f. 9) in York Museum.
gibbosa, Sow., M. C., t. 211, f. 2; Lyc., Suppl., p. 42, t. xxxii., f. 11.						Jm			Also Bloody Beck, Hackness.
imbricata, Sow., M. C., t. 212, f. 1, 3; (Mytilus) L. & M., p. 41, t. iv f. 2.		8?	Wr. S T		Wr. 1 5 P 1 H 1 5 S 1	Wr. S Jm H 1	Wr.		
Leckenbyi, L. & M., p. 131, t. xiv., f. 9.						L ? P?			"G. O." Scarborough (L. & M. an Phil.).
Lycetti, Morris, Cat., p. 210; Whiteaves, Ann. Nat. Hist., 1861; M. pulcherrimus, L. & M., p. 38, t. iv., f. 12, 12a (non Röm.).						Wr.		C.R.	·
plicata, Sow., v. M. sowerhyana.									
scalprum, Sow., v. Tab. I.	LL	Wr.			,				

, Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Modiola—cont. sowerbyana, d'Orb., (Mytilus) Prod. I., p. 282; Bronn, Leth. Geog., p. 233, t. 15, f. 18; L. & M., p. 38, t. iv., f. 1; Modiola plicata, Sow., M. C., t. 248, f. 1; Zieten. Petref., t. 59, f. 7; Goldft, Petref., p. 175, t. 130, f. 12. ungulata, Y. & B., 1822, p. 218, pl. vii., f. 10; L. & M., p. 132; Mytilus edulis, Y. & B., 1828, p. 221, pl. vii., f. 10; Mytilus tumidus, L. & M., p. 37, t. iv., f. 5.			P 1 8 4 T 4 Wr. 1 P 1		Wr.	Wr.		C.R.	
Mya: æquata, Phil., v. Myacites. angulifera, Sow., v. Goniomya. calceiformis, Phil., v. Myacites. literata, Sow., v. Goniomya. margaritifera, Y. & B., v. Myacites calceiformis. modica, Bean, v. Myacites. v-scripta, Sow., v. Goniomya.									
Myacites: equatus, Phil., (Mya) G. Y., pl. xi., f. 12; L. & M., p. 199, t. xii., f. 15.			William P			Wr 1 Hi P 1 L Jm		Kel	Type in York Museum.
Beanif, L. & M., p. 136, pl. xv., f. 11 a, b. caiceiformis, Phil., (Mya) G. Y., pl. xi., f. 3; L. & M., p. 113, t. xi., f. 2; Lyc., Suppl., p. 80, t. xlii., f. 1, la; Mya margariti- fera, Y. & B., pl. vii., f. 2; Pano- pæa Haueri, Oppel, Jura., p. 480.						Wr P 1 Wr 1 H 1 S	1	. Kel	Dr. Lycett states that this species into found below the Combrasi Suppl., p. 80. Lyc. (pl. xlii., f. 1) in Jm. Type in York Museum.
compressiuscuius, Lyc. Cottesw. Hills Handb., p. 129, pl. v., f. 1. crassiusculus, L. & M., v. Homo-					H Jn P	1			
mya. decurtatus, Phil., (Amphidesma) G. Y., pl. vii., f. 11; L. & M., p. 137, t. xv., f. 10a, b; (Pleuromya), Ag. Etud. Crit., p. 232; (Lutraria) Goldf., Petref., t. 153, f. S.				8		r. P	Be Wi H 1 P 1 Jm	1	•
DECUSSATUS, Bean, MS.							Be P	Kel	

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont.		Γ							
Myacites—cont. dilatus, Phil., (Mya) G. Y., pl. xi., f. 4; L. & M., p. 114, t. x., f. 5a, b; (Sanguinolaria?) Buckm., Geol. Chelt., pl. vi., f. 1; (Panopæa) d'Orb., Prod. I., p. 273.			P						
gibbosa, L. & M., v. Homomya.									
Goldfussii, Lyc., Cottes, Hills Handb., p. 139, pl. vi., f. 2; Pleu- romya elongata, Ag., Etud. Crit., p. 244, t. 27, f. 3-8; (Lutraria) Goldf., Petref., t. 163, f. 4.						Wr.	Jm		
modicus, Bean, (Mya) Mag, Nat. Hist., 1839; Lyc., Suppl. G. O. Moll., p. 83, t. xhiii., f. 1, 1a.				S			Be Wr.	Kel	Leck. Coll. Rare.
oblongus, Wright, MS.; ? (Sanguinolaria) Buckm., Geol. Chelt., p. 99, t. vi., f. 2.					Wr. Jm		P		Wright's species is probably the same as Buckman's.
Phillipsi, Morris, v. M. scarbur- gensis.	Ì								
Fecurvus, Phil., (Amphidesma) G. Y., pl. v., f. 25; Lyc., Suppl., p. 81, t. xxvi., f. 4, 4a; Latraria sinuosa, Röm., Verst. 001, t. 19, f. 24; Nachtr., p. 42; Pleuromya recurva, Ag., Etud. Crit., p. 234, 246, t. 29, f. 9.					H		Wr. H Ly P	C.R.	Type in York Museum. Lyc. (pl. xxxyi., f. 4) in Leck, Coll.
scarburgensis, L. & M., p. 138, t. xv., f. 13; Lutraria gibbosa, Phil., G. Y., pl. ix., f. 6; M. Phillipsi, Morris, Cat., p. 214.					,	L Jm P	Jm S		Bean Coll,
securiformis, Phil., (Amphi desma) G. Y., pl. vii., f. 10; L. & M., p. 136; t. xiii., f. 15; (Pleuromya) Ag., Etud. Crit., p. 232.						S ₁ L ₁ P ₁ H ₅	Wr. H L P	Kel	Abundant in the Cornbrash.
sinister , Ag. (Arcomya) Etud. Crit., p. 170, t. 9, f. 1-3 t. 9, f. 10-13; Lyc., Suppl., p. 82, t. xxxv., f. 17, 17a; (Panopæa) d'Orb., Prod. I., p. 273.							Jm Ly P		Lyc. (pl. xxxv., t. 17) in Leck, Coll.
Mytilus:							Jm		
amplus, Sow., v. Pinna.									
asper, L. & M., v. Modiola.									
cuneatus, Phil., G. Y., pl. xi., f. 21 (non Sow.). imbricatus, Sow., v. Modiola.			Wr.		P				
edulis, Y. & B., v. Modiola ungu- lata. Mytilus sub- lævis.									

Species	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
	Pa	Ä	Ã	EE	H H	5	පි	Pa	
(Dimyaria)—cont. Mytlius—cont. furcatus, Goldf., v. Modiola.					•				
jurensis, Röm., v. M. sublævis.		l							
pulcherrimus, L. & M., v., Modiola Lycetti.									
sowerbyana, d'Orb., v. Modiola.									
subleevis, Sow., M.C., t. 439, f. 3; Bronn. Leth. Geog., p. 236, t. 19, f. 14; Goldf., Petref., ii., p. 170, t. 129, f. 3; L. & M., p. 41, t. iv., f. 19; ? M. jurensis, Röm., Verst., Ool., p. 89, t. 4, f. 10; ? M. edulis, Y. & B., t. vii., f. 10.						Ħ	Be Wr. P		
tumidus, L. & M., v. Modiola ungulata.									
Wucula: axiniformis, Phil., v. Tancredia.									
cordata, K. & D., v. Leda lachryma.		ł							
lachryma, Sow., v. Leda.									
lachryma, Phil., v. Leda anglica.									
nucleus, Desl., v. N. subglobosa.								1	
subglobosa, Röm., Verst. Ool., t. vi., f. 7; Whidborne, Q. J. G. S., xxix., p. 522, pl. xviii, f. 4; N. nucleus, Desl., Mém. Soc. Linn. Norm., 1837, p. 35, pl. i., f. 8 (non Linn.).							Jm P		
 variabilis, Sow., M. C., t. 475, f. 2; Phil., G. Y., pl. ix., f. 11; L. & M., p. 51, t. v., f. 13, 13a. 	U,L		Wr. Jm			P Ym	Wr	Kel	Phil. (pl. ix., f. 11) in York Museum.
Opis:		1	î						
Leckenbyi , Lyc., Suppl. G. O. Moll., p. 61, t. xxxvii., f. 9, 9a;		ŀ					Wr. Ly	}	Leck. Coll. Very rare.
O. scarburgensis, Leck., MS., Wright, Q. J. G. S., vol. xvi., p. 27.		l					H	1	
, in the same of t							P	l	
		ı			1		Jm	l	
scarburgensis, Leck., v. O. Leck- enbyi.							T T		
similis, Sow., (Cardita) M. C., t. 232, f. 3; Phil., G. Y., pl. xi., f. 39; L. & M., p. 81, t. vi., f. 4, 4a.			Wr. 1 H 1 P				Be		O. Phillipsii of Wright's and Hudle ston's Dogger lists.
triangularis, Wright, v. Isocardia.			1						
Panopæa:							1	1	
dilata, d'Orb., v. Myacites.		1							
gibbosa, Sow., v. Homomya.	-				1			1	
Haueri, Oppel., v. Myacites calcei- formis.		`							
sinistra, d'Orb., v. Myacites.		l				1			1

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	REMARKS.
(DIMYARIA)—cont. Pleuromya, v. Myacites.				•					
Pholadomya: acuticosta, Sow., M. C., t. 546, f. 1, 2; L. & M., p. 121, t. xiii., f. 13. angustata, Sow., M. C., t. 327.				8 4		P 1 H?	Be Wr H	Kel C.G.	
fidicula, Sow., M. C., t. 225. Heraulti , Ag., Étud. Crit., Appendix, 1845; L. & M., p. 124, t. xii., f. 1; t. xy., f. 4; Ph. Murchisoni, Ag., Etud. Crit., p. 79, t. 4c, f. 5-7; Röm., Verst. Ool., p. 128, t. 15, f. 7 (non Sow.).		Wr.	T s	SP 4	Wr. 1 8 1 H 1 P	Wr. H S			L. & M. (pl. xv., f. 4) in Leck. Coll
lyrata, Sow., (Cardita?) M.C., t. 197, f. 3. Murchisoni, Ag., v. Ph. Heraulti. Murchisoni, Phil., v. Ph. Phillipsii. nana, Phil., v. Ph. ovalis. obliquata, Phil., v. Gressyla See-				S?	Jm 1	249			
bachii, Tab. I. ovalis, Sow., M. C., t. 226; L. & M., p. 141, t. xv., f. 14; Ph. ovu. hum, p. 122, t. xiii., f. 12; Phil., G. Y., 1875, p. 255, (in part); ? Ph. pelagica, Ag., Etud. Crit., p. 105, t. 2, f. 5-7; Ph. nana, Phil., G. Y., pl. ix., f. 7. ovulum, Ag., Etud. Crit., p. 119, t. 3, f. 7-9; t. 3b, f. 1-6; Lyc., Suppl. G. O. Moll., p. 84, t. xxxv., f. 18, 18a.						L P 1	Be Wr. L P L H L L H L H	Kel	Rare. Lyc. (pl. xxxv., f. 18) în Leck,
ovulum, L. & M., v. Ph. ovalis. pelagica, Ag., v. Ph. ovalis. Phillipsii, Morris, Cat., p. 221; Lyc., Suppl., p. 85, t. xlii., f. 2, 2a; Ph. Murchisoni, Phil., G. Y., pl. vii., f. 9 (non Sow.).							Be Wr. Ly		Ahundant. Type in Jm.
producta, Sow., (Cardita ?) M. C., t. 197, f. 1.						P ?	Jm		"Bath Oelite."

•					1 .				
··· · · · · SPECIES.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up,	Remarks.
(DIMYARIA)—cont.									
Pholadomya-cont.	-								
Sæmanni, L. &. M., p. 123, t. xv., f. 3.			s	8	Wr. P H H	L P			Type in Leck. Coll.
simplex, Phil., v. Tab. III.							Be Wr:	C.G.	
Pholas: costellata, L. & M., p. 142, t. xiii., f. 18.					Wr.		Wr. P 1		Type in Leck, Coll.
pulchralis, Bean, L. & M., p. 141, t. xiii., f. 17.						L P	1		Coll. of Dr. Murray.
Pleuromya elongata, Ag., v. Myacites Goldfussii.				i.		Wr.			
Psammobia: lævigata, Phil., Pullastra: oblita, Phil., opalina, Quenst.									
recondita, Phil., v. Astarte.									
Quenatedtia: 1ævigata, Phil., (Psammobia) G. Y., pl. iv., f. 5; L. & M., p. 185, t. xiv., f. 13.			L Wr.			L H Wr.	Be Wr. P		L, & M. (pl. xiv., f. 13) in Leck. Coll.
oblita, Phil., (Pullastra), G. Y., pl. xi., f. 15; L. &. M., p. 96, t. ix., f. 4, 4a, b; t. xv., f. 12.			LPT			1	P Jm		Type in York Museum.
opalina, Quenst. (Pullastra) Jura, t. 45, f. 8.			•		Jm				
TENUISSIMA, Bean, MS.		1	Wr9						
Sanguinolaria: dilata, Buck., oblonga, Buck., v. Myacites.									
parvula, Bean., v. Anatina.									
undulata, Phil., v. Anatina siliqua.									
Sowerbya: triangularis, Phil., (Cucullaa), G. Y., pl. iii., f. 31; Lyc., Suppl., p. 66, t. xxxv., f. 3, 3a, h; (Arca) d'Orb., Prod. I., p. 369.	,		Wr. Ly			Ly	Be Wr. Ly Jm H		

Species.	Pass down.	Bles Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Tancredia: axiniformis, Phil., (Nucula) G. Y., pl. xi., f. 13 (non L. & M.).			Wr. 1 P 1 H	S					Type in York Museum.
donaciformis, Lyc. Ann. N. H., 1850, p. 424.			S				J _m		
TELLINA: PROLETARIA, Bean, MS.							Be Wr.		
Thracia: lata, Munst. (Sanguinolaria), Goldf. Petrcf., t. 160, f. 2.		Jm							
sp. n.					. !	Wr.			•
Trigonia :									
angulata, Sow., v. T. conjungens. angulata, Phil., v. T. v-costats.									According to Dr. Lycett does not occur in Yorkshire.
casscape, d'Orh., Prod. I., p. 308; Lyc., Suppl., Gt. Ool. Moll., p. 49, t. xxxvii., f. 10; Lyc., p. 170, pl. xxxii., f. 1-5.							Wr. P H Jm		? T. costata, of Dr. Wright's list. Lyc. (pl. xxxii., f. 1-5) in Jm.
clavellata, Ziet., v. T. signata.		l			1		-		
composita, Lyc., v. T. spinulosa.									•
conjungens, Phil., Lyc., p. 62, pl. x., f. 5, 7, 8; pl. xiii., f. 6.					Ly 1 5 P 1 H 1 5 Jm 1 K 6			2	T. angulata of Dr. Wright's list. Type in Jm.
costata, Sow., v. T. cassiope.									According to Dr. Lycett, T. costata does not occur in Yorkshire. He refers the specimens so named which have
(T. elongata.									been procured from the Inferior Onlite to T. denticulata and those from the Cornbrash to T. cassiope
costata, Quenst., v. T. pullus.							1		and T. elongata.
Culleni, Lyc., p. 173, pl. xxxi., f. 9, 9a.				l	Jm				Type in Jm.
decorata, Lyc., v. T. signata. denticulata, Ag., Trig., p. 38, t. xi., f. 1-8; Lyo., p. 152, pl. xxix, f. 1-4. T. costata, Ziet., t. 137, f. 3.			Ly Wr. P 1 Jm 1 H		Wr. 5 H 1 S 5 Jm 1 8	Wr.		Kel	T. costata of Inf. Ool. lists. May include the T. pullus of T. & B., Yorksh Lias, p. 25. Lyc. (ph xxix., f. 1-3) fn Jm.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont.									
Crigonia—cont. duplicata, Sow., M. C., t. 237, f. 4; M. & L., pl. vi., f. 2; Lyc., p. 14, pl. 1, f. 8-10.					Wr.				A doubtful species.
elongata, Sow., M. C., t. 431, f. 1-2; Damon, Geol. Weymouth, pl. 2, f. 1-2; Lyc., Suppl. G. O. Moll., p. 46, t. xxix, f. 6, Lyc., p. 154, pl. xxx., f. 3, 3a, 3b, 6; T. costata, var. Sow., Geol. Trans., 2nd ser., vol. v., pl. xxi., f. 16.							Be Wr. H I Jm		"In the Oxford Clay of Weymouth."
elongata, var. angustata, Lyc., pl. xxx., f. 1, 1a, 2.							Ly Jm		"Limited to the Cornbrash of the North of England." (Lyc.) Type in Jm.
elongata, var. lata, Lyc., pl. xxx., f. 4, 5.							Ly Jm	Kel	"Almost limited to the Cornbrash." (Lyc.) Type in Jm.
formosa, Lyc., p. 35, pl. v., f. 4–6; T. striata, Quenst., Jura, t. 46, f. 2.			J _m						
gemmata, Lyc., Ann. Mag. Nat. Hist., 1853, pl. ix., f. 8; Lyc., p. 15, pl. i., f. 7.					Wr.				
hemisphærica, var. gre- garia, Lyc., p. 174, pl. xxxiii., f. 4-6.					Ly 6			,	Very rare. It is doubtful whether this occurs in the Inf. Ool. Sands or in
Leckenbyi , Lyc., p. 71, pl. xvi f. 1, 2.		Ly H			Jm				the Jurensis beds of the Lias. Lycett states that it is found below the beds with Lingula Beanii, but associated
Moretoni, L. & M., p. 57, t. v., f. 19; Lyc., p. 47, pl. ii., f. 4, 5, 7, 8; pl. iv., f. 6.		Ĵ'n					Jm		with Terebratula trilineata. Types in Jm. and Leck, Coll.
Phillipsi, L. &. M., p. 62, t. vi., f. 1; Lyc., p. 38, pl. vi., f. 3, 4; T. striata, Ag., Trig., pl. iv., f. 12.	•					S			
 pullus, Sow., M. C., t. 508, f. 2, 3; Lyc., p. 164, pl. xxxiv., f. 7-9; T. costata, var. pullus, L. & M., p. 58, t. 1, f. 22; T. costata, Quenst., Jura, pl. 67, f. 13. 			s		Ym?		Be	Kel	
Ramsayi, Wright, Q. J. G. S., xii., p. 323; Lyc., Cottesw. Hills Handb., p. 26, pl. i., f. 8; Lyc., p. 49, pl. vi., f. 6.		Wr. T							Very rare.
recticosta, Lye., p. 16, pl. i., f. 4-6.			P		Ly S H H	S ?		,	Type in Jm.
scarburgensis, Lyc., Suppl., Gt. Ool. Moll., p. 48, t. xxxvii., f. 1; Lyc., p. 31, pl. iv., f. 1-4.					P Im		Wr. Ly P H		T. clavellata of Young and Bird. Phillips, Williamson, and Bean in their Cornbrash lists. See Lyc. Suppl., Gt. Ool. Moll., p. 49. Lyc. (pl. iv., f. 1-4) in Jm.
sculpta, Lyc. p. 157, pl. xxxiv.,			s			$\mathbf{J_{i}^{m}}$	Jm		; •

Species.	Pass down,	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont.									
Trigonia—cont. sharpiana, Lyc., p. 79, pl. xv., f. 11; pl xvi., f. 3-6.			Ly Jm						Type in Jm.
signata, Ag., Trlg., p. 18, pl. iii., f. 8; pl. ix., f. 5; Chap. & Dew., Pal. Lux., p. 172, pl. xxvi, f. 1; Lyc., pp. 29, 204, pl. ii., f. 1, 2, 3; T. ctavellata. Ziet., Pet. Würt., pl. Iviii, f. 3; Quenst., Jura, t. 60, f. 13; T. decorata, Lyc., Mag. Nat. Hist., vol. xii., pl. ix., f. 1; L. & M., pl. xv., f. 1.			P		S	Wr 1 Jm 1 P 1 H	Wr		T. clavellata, Williamson, Geol. Trans., ser. 2, vol. v., p. 233. Lyc. (pl. ii., f. 1-3) in Jm. L. & M. (pl. xv., f. 1) in Leck. Coll. Cm.
signata , var. Zietenii , Lyc., Suppl., Trig., p. 5, pl. i., f. 3-5, 16, 17; pl. iv., f. 7.						Ly			Dr. Lycett apparently includes all the above references to <i>T. signata</i> under this variety.
spinulosa, Y. & B., G. Y., p. 225; Lyc., p. 44, pl. iii., f. 4, 5, 6; T. striata, Phil., G. Y., pl. xi., f. 38; d'Orb., Prod. I., p. 278; T. tuberculata, Ag., Trig., p. 20, pl. ii., f. 17; pl. 9, f. 6-8; T. composita, Lyc., in note to Dr. Wright's paper, Q. J. G. S., xvi., p. 16.			Ly Wr. P 1 3 4 H 1 Jm	S?					Probably includes T. striata. Sow., in Williamson, and Tate and Blake Yorksh. lists. Dr. Lycett in his monograph of the Trigonies appears to have forgotten his note to Dr. Wright's paper, as T. composita is not mentioned in the later work, and the synonomy to a certain extent does not agree. Lyc. (pl. iii, f. 4-6) in Jm.
striata, Phil., and d'Orb., v. T. spinulosa.			4						
striata, Ag., v. Phillipsi.								ĺ	
tenuicosta, Lyc., Proc. Cottesw. Nat. Club, vol. 1, p. 252, pl. ix., f. 4; Lyc., p. 180, pl. xxxiii., f. 7-9.					H 9	P			
tuberculata, Ag., v. T. spinulosa.									
v-costata, Lyc., Cottesw. Hills Handb., pl. vi., f. 5; Lyc., p. 66, pl. xiii, f. 5; pl. xv., f. 1-4; T. angulata, Phil. G. Y., 1829, p. 156 (non Sow.); Williamson, Geol. Trans., ser. 2, vol. v., p. 229.			Ly Wr. P 1 H Jm						Lyc. (pl. xv., f. 2-4) in Jm.
Unicardinm : cognatum, d'Orb., v. Cardium.									
depressum, Phil., (Corbula), G. Y., pl. ix., f. 16; L. & M., p. 133, t. xiv., f. 10.						Wr. H Jm D	Wr.	c.o.	L. & M. (pl. xiv., f. 10) in Leck, Coll.
gibbosum, L. & M., p. 132, t. xiv., f. 11.					Wr. P	P P I Jm	Jm?	Kel	Type in Leck. Coll.
globosum ?, Ag., (Mactromya), Etud. Crit., p. 200, pl. 9d, f. 9-14.				S	1	1		,	

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
(DIMYARIA)—cont. Unicardium—cont. incertum, d'Orb., v. Cardium. sulcatum, Leck., v. Tab. III.							P	Kel	Y
Unio: abductus, Phil., v. Gresslya. distortus, Bean, Mag. Nat. Hist., vol. ix., p. 376. humatus, Brown, v. Cardinia humata. insperatus, Phil., MS., v. Anodon.					P?	,			? Myacites. "Middle Shalc, Gris- thorpe." (Phil.). Type in Bm.
Venus: tenuis, K. & D., v. Tab. I. SCAPHOPODA. Dentalium: elongatum, Münst., v. Tab. I. entaloides, Desl., Mém. Soc. Linn. Norm., vii., p. 128, t. vii., f. 36; I.yc., Suppl. G. O. Moll., p. 28, pl. 31, f. 1ia. b; D. Parkin- soni, Quenst., Handb., t. 35, f. 19, Jura, t. 65, f. 5-6.	Ju ML	т	T4 T1				P Ly Jm	c.g.	D. glabellum, Bean, Cornbrash Fossils, Mag. Nat. Hist., 1839, D. annulatum, Bean, Leckenby, Q. J. G. S., xv., p. 7.
GASTEROPODA. Actæon: glaber, Phil., v. Actæonina glabra. Sedgvici, Phil., (Auricula) G. Y., pl. xi., f. 33; d'Orb., Prod. I., p. 263; I. & M., p. 118, pl. xv., f. 9; Hud., Geol. Mag., 1885, p. 252, pl. v., f. 4.			H 1 Jm 1 Wr. 1	* .	P		P		Type in Ym. Hud. (pl. v., f. 4). in Bean Coll. Bm. Hudleston suggests this is the form noted by T. & B. in the Lias.
Sedgvici, var. pullus, L. & M., v., Tab. 1. Actæonina : cinerea, Hud., Geol. Mag., 1885, p. 206, pl. v., f. 8, 8a.	Ju		T		H	P 1	H		Probably the "Tornatella" and Actaon" of the Leek. Coll. (F.de Hudleston.) "Actaon glaber" of Leekenby's lis'. (Fide Hudleston.) Type in Leek. Coll.
Deslongchampsii, d'Orb., v. A. gigantea. gigantea, Desl (Tornatella) Mém. Soc. Linn. Norm., vii., p. 137, pl. 10, f. 27, 28; I. & M., p. 119, pl. xv., f. 18; Hud. Geol. Mag., 1885, p. 203; A. Deslong-champsii, d'Orb., T. J. ii., p. 171, pl. 286, f. 11.			:		Ħ	P?			Very near to A. scarburgensis. Bean Coll. Bm.
glabra, Phil., (Acteon glaber) G. Y., pl. ix., f. 3; d'Orb., Prod. I., p. 264; L. & M., p. 120, pl. xv., f. 10; Hud. Geol. Mag., 1885, p. 205, pl. v., f. 6, 6a.			H		H Wr. P	H Wr? P			Had. (pl. v., f. 6) in Bean Coll. Bm.

SPECIES.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Actæonina—cont. humeralis, Phil., (Actæon), G. Y., pl. xi., f. 34; Hud., Geol. Mag., 1885, p. 202, pl. v., f. 1, 1a, 3. mitræformis, Brauns, Stratigr. und Pal. d' Hilsm., 1864, p. 37, t. 5, f. 12; Der Mittl. Jura, 1869, p. 194. scarburgensis, Lyc Suppl. G. O. Moll., p. 28, t. xxxiii., f. 13; Hud., Geol. Mag., 1885, p. 204, pl. v., f. 9, 9a. tumidula, L. & M., p. 120, pl. xv., f. 14; Hud., Geol. Mag., 1885, p. 205, pl. v., f. 7. sp., ("tumescens,") Hud., Geol. Mag., 1885, p. 205, pl. v., f. 2. Alaria: arenosa, Hud., Geol. Mag., 1884, p. 198, pl. vii., f. 7; Jura. Gast., p. 110, pl. iv., f. 1. bispinosa, Phil., var. elegans, Hud., Geol. Mag., 1884, p. 198, pl. vii., f. 7; Jura. Gast., p. 110, pl. iv., f. 3. composita, Sow., v. A hamus. rerassicostata, Hud., Jura. Gast., p. 116, pl. iv., f. 3. hamus, Desl., var. Phillipsii, d'Orb., (Pterocera), Prod. I., p. 270; L. & M., p. 111, pl. xv., f. 15, 15a; Hud., Geol. Mag., 1884, p. 147, pl. vi., f. 3-5; Jura. Gast., p. 116, pl. iv., f. 8; Rostellaria composita, (Sow.), Phil., G. Y., pl. ix., f. 28; Rost. hamus, Desl., Mem. Soc. Linn. Norm., vii., p. 173, pl. ix., f. 32-36. myurus, Deel. (Rostellaria) Mem. Soc. Linn. Norm., vii., p. 173, pl. ix., f. 32-36. myurus, Deel., (Rostellaria) Mem. Soc. Linn. Norm., vii., p. 176, pl. ix., f. 23-25; Piette, Pal. Fr., 1864, p. 30, pl. 2, f. 8-11; Hud., Geol. Mag., 1884, p. 196, pl. vii., f. 6.			HIW: PITI HIW: PI	Biler	H-Wr-P- H-	H P H	H 1 Le 1 P 1	c.o.	Types in York Museum. Closely related to A. chrysalis. P Variety of A. gigantea. Type in Leck. Coll. Type in Bean Coll. Bm. Bean Coll. British Museum. Rare. Allied to A. Phillipsii. Type in Leck. Coll. See also Tab. III. This variety is stated by Hudleston to be very rare. Type in Leck. Coll. Single specimen. Hud. (pl. vi., f. 3, 4) in Leck. Coll. P = A. lævigata, L. & M. Hud. (pl. vii., f. 6) in Leck. Coll.
pseudo-armata, Hud., Geol. Mag. 1884, p. 150, pl. vi., f. 6, 6a; Jura. Gast., p. 125, pl. v., f. 8. spinulosa, Hud., Jura. Gast., p. 113, pl. iv., f. 5a, 5b; A. Phil- lipsis (in part), Hud., Geol. Mag., 1894, p. 149, pl. vi., f. 5. sublævigata, Hud., Jura.			H Jm H						Very rare. Type in Leck. Coll. Can. Hud. Coll.
sublævigata , Hud., Jura. Gast., p. 129, pl. vi., f. 3.			H						Type in Leck. Coll.

Species,	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarkė.
Alaria—cont.									
unicarinata, Hud., Geol. Mag., 1884, p. 149, pl. ví., f. 1, 2, 2a; Jura. Gast., p. 118, pl. iv., f. 18.			H						Types in York and British Museums.
sp. , Hud., Geol. Mag., 1884, p. 198, pl. vii., f. 5, 5a.		<u>'</u>	H			,			Leck. Coll.
Amberleya: armigera, Lyc., Suppl., G. O. Moll., p. 20, pl. 31, f. 6; Hud., Geol. Mag., 1884, p. 245, pl. vlii., f. 5 a. b.			н				H Ym	Kel	Leck. Coll. Purpurina ornata, of Wright's Ch. list.? "Littorina ornata, Sow." Bean, Mag. Nat. Hist., 1839, p. 62, and Leckenby, Q. J. G. S., Xv., p. 7. Turbo armigera, Lyc. Leckenby's list of Cornbrash fossils, 1866. Type in Scarborough Museum. Hud.
biserta, Phil., (Trochus) G. Y., pl. xi., f. 27; (Litterina) Hud., Geol. Mag., 1884, p. 248, pl. viii., f. 9, 11; (Amberleya) Hud., Jura. Gast., p. 288, pl. xxii., f. 13, 14; pl. xxiii., f. 2.			Jm 1 Wr 1 P						(pl. viii., f. 9, in Leck, Coll. (f. 11) in Jermyn Street Museum.
Auricula, v. Actæon. Bourguetia, v. Phasianella.									
Bulla: undulata, Bean, Mag. Nat. Hist., 1899, p. 61, f. 22; L. & M., p. 96, pl. viii, f. 8; Hud., Geol. Mag., 1885, p. 254, pl. v., f. 10, 10a; Cylindrites undulata, Phil., G. Y., p. 260.	1					1	Be Le 1 H Jm		Hud. (pl. v., f. 10) in Leck. Coll.
Cerithium: Beanii, L. & M., p. 112, pl. xv., f. 5; Hud., Geol. Mag., 1884, p. 59, pl. iii., f. 10, 11; Jura. Gast., p. 159, pl. ix., f. 5.		н	H Jm Wr	1		Wri	1		Hud. (pl. iii., f. 10, 11) in York Museum.
caninum, Hud., v. Fibula.		İ						1	
comptonense, Hud., v. Exclissa weldonensis.									
echinatum, von Buch, v. C. muricatum.		1							
elongata, d'Orb., v. Turritella opa- lina.			-					Ì	
flexuosum, Münst., v. C. vetus- tum.									,
gemmatum, L. & M., p. 115, pl. xv., f. 6; Hud., Geel. Mag., 1884, p. 58, pl. iii., f. 9; Jura. Gast., p. 147, pl. viii., f. 4.	. 1				P	H Wr	Be Wr P		Hud. (pl. iii., f. 9) in Bean Coll. Bm.
granulato-costatum, Münst., v. C. muricatum.		1					1		
LECKENBYI, Wright, MS., Q. J. G. S., xvi., p. 32.					Wr				•
Leckenbyi Hud., Geel. Mag. 1884, p. 61, pl. iii., f. 12; Jura. Gast., p. 158, pl. ix., f. 4.			H						? Variety of C. Beanti. Single specimen "Might be called C. Beanti. var. elongatum." (Hud.) Type in Leck.
millepunctatum Desl., v. C. muri- catum.	.							-	Coll.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Ŗæmaræs.
Cerithium—cont. muricato-costatum 1, Münst., Goldf., Petref., t. 173, f. 12; Hud., Geol. Mag., 1882, p. 250, pl. vi., f. 17. muricatum, Sow., (Turritella) M. C., t. 499, f. 12; Hud., Geol. Mag., 1884, p. 51, pl. iii., f. 1-8; C. echinatum, Von Buch, Jura, p. 56; C. granulato-costatum, and C. muricato-costatum, Münst. (pars), Goldf., Petref., pl. 173, f. 10, 12; ? C. millepunctatum, Desl., Mém. Soc. Linu. Norm., vii., p. 204, pl. xi., f. 24-28.	U.L.	H Wr. T	Jm 1 H 1 Wr.		H	H	H 1 P 1	C. O.	Allied to C. vetustum and C. muricatum. Hud. (pl. vi., f. 17) in Leck. Coll. See also Teb. I. Probably the C. multipunctatum and C. quinguepunctatum of Wright's lists; also the C. quinquepunctatum, T. & B., p. 19. Varieties of C. muricatum given by Hudleston, Geol. Mag., 1834, pp. 54, 55:—var. seslineatum, f. 3. Dogger Sands, var. quadricinctum, f. 4. Cornbrash. var. Culleni, f. 5. Kellawaye Rock, var. trilineatum, f. 6. Scarborough Limestone; in York Museum. Hud. (pl. iii., f. 2-5, 7, 8) in Leck. Coll. See also Hud. Jura. Gast., pp. 146, 147.
quadrilineatum, Röm., v. Tab. I. quadrivittatum, Phil. & d'Orb., v. v. Turritella. quinquepunctatum, Desl., v. C. muricatum.	J .L .	H T							
tortile, Desl., v. Nerinæa granu- lata. turris, Hud., Geol. Mag 1884, p. 61, pl. iii., f. 13; Jura. Gast., p. 166, pl. ix., f. 15. vetustum, Phil., (Terebra) G. Y., pl. ix., f. 27; d'Orb., Prod. I., p. 263; L. & M., p. 114, pl. xv., f. 7; (Chemnitzia) Hud., Geol. Mag., 1882, p. 247, pl. vi., f. 9-11; Melania scalariformis, Desl., Mem. Soc. Liun. Norm., vii., p. 218, pl. xi., f. 63-66; C. flexuosum,		Wr.	H? Jm 1 Wr. 1 Jm 1 Jm 1		H Wr. P	Wr?			Single specimen. Jermyn Street Museum. The name "turris" being preoccupied, the species is to be called *C. cerulænia. (Hudleston MS.) Hud. (pl. vi., f. 9, 11) in Leck. Coll.
Münst., Goldf., Petref., t. 173, f. 15; Cerithium vetustum, Hud., Jura. Gast., p. 148. vetustum-majus, Hud. Jura. Gast., p. 150, pl. viii., f. 6; Chemnitzia vetusta-major, Hud. Geol., Mag., 1882, p. 248, pl. vi., f. 12. vetustum var. seminuda, Hud. Jura. Gast., p. 151, pl. viii.,			H H						Type in Leck. Coll. Type in Leck, Coll.
f. 7; (Chemnitzia) Hud., Geol. Mag., 1882, p. 249, pl. vi., f. 13. vetustum, var. Hud. Jura. Gast. pl. viii., f. 5d.; Chemnitzia vetusta var. scalariformis, Geol. Mag., 1882, p. 249, pl. vi., f. 14. vetustum, vars. Hud., (Chemnitzia) Geol. Mag., 1882, pl. vi., f. 15, 16.			H ₁		н				Type in Leck. Coll.
7 sp., Hud., Geol. Mag., 1884, p. 62, pl. iii., f. 15.		н							? Turritilla. Leck. Coll.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Chemnitzia :									
coarctata?, Desl., (Melania) Mém. Soc. Linu. Norm., vii., p. 226, pl. xii., f.: 11, 12; Hud., Geol. Mag., 1882, p. 243; M. hedding- tonensis (pars) Desl., ibid., p. 225; Phil., G. Y., 1835, pp. 123, 129.			H			H ?			? Yorkshire. May be included under Ch. lineata.
lineata, Sow., (Melania) M. C., t. 218, f. 1; Hud., Geol., Mag., 1882, p. 241, pl. vi., f. 1a, 1b, 2, 3; Melania procera, Desl., Mém. Soc. Linn. Norm., vii., p. 223, pl. xii., f. 5, 6; Ch. procera, d'Orb., T. J., p. 41, pl. 239, f. 2, 3.			H P		H				? Terebra melanicides, Bean. See Hud., Geol. Mag., 1882, p. 242. Hudleston now refers the Dogger speci- mens to Pseudomelania procera, Desl. See Jura. Gast., p. 237, pl. xviii., f. 2. Hud. (pl. vi., f. 1, and pl. xviii., f. 2) in Leck. Coll.
lineata-procera, var. scar- burgensis, L. & M., p. 115, pl. xv. f. 8; Hud., Geol. Mag., 1884, p. 243, pl. vi., f. 4.			Wri		H, P	H Jm			Type in Bean Coll Bm. Hud. (pl. vi., t. 4) in Leck. Coll. Hudleston now refers this to Pseudo- melania Lonsdalei, L. & M., pl. vii., f. 13. See Jura. Gast., p. 243, pl. xix., f. 2.
procera, d'Orb., v. Ch. lineata.		1							
vetusta, Phil., v. Cerithium. vittata, Phil., (Melania) G. Y., pl. vii., f. 15; Lyc., Suppl., p. 14, pl. 81, f. 10; Hud., Geol. Mag., 1882, p. 244, pl. vi., f. 5, 6.					P?		Be Wr. H Le	Kel	Type, much broken, apparently in Scarhorough Museum. Lyc. (pl. xxxi., 1.10) in Jm. Hud. (pl. vi., f. 5, 6) in Leck. Coll.
Glamabtania .		•					Jm		
Cloughtonia: cincta, Phil., (Phasianella), G.Y., pl. ix., f. 29; d'Orb., Prod. I., p. 267; Hud., Geol. Mag., 1882, p. 203, pl. v., f. 14; Jura. Gast., p. 247, pl. xix., f. 7; Natica (Euspira) cincta, L. & M., p. 113, pl. xv., f. 20.			H		Ħ	Wr 1 P 1 3 H]	Type in York Museum. Hud. (pl. v., f. 14) in Leck. Coll. (pl. xix., f. 7) in Hud. Coll.
Crysostoma: ovulata, Heb. & Desl., v. Turbo lævigatus.								İ	
Cylindrites, v. Bulla.					1			1	
Delphinula, v. Turbo.									1
Ditremaria, v. Trochotoma.									
Eulima: lævigata, L. & M., p. 114, pl. xv., f. 4; Hud., Geol. Mag., 1882, p. 245, pl. vi., f. 7, 8.						Wr 1 H	H		Pseudomelania lævigata, Hud. Jura Gast., p. 244, pl. xxi., f. 6. Type in Bean Coll. Bm. Hud. (pl. vi., f. 8)
Exelissa: weldonensis, Hud., Jura. Gast., p. 179, pl. xi., f. 8; Ceri- thium (Kilvertia) comptonense, Hud., Geol. Mag., 1884, p. 62, pl. iii., f. 14.	1				H	1	ī		in Leck. Coll. Type in Leck. Coll.
Fibula: canina, Hud., Jura. Gast., p. 175, pl. xi., f. 2; Cerithium caninum, Hud., Geol. Mag, 1884, p. 107, pl. iv., f. 1, 2.			Ą						Rare. Types in Bean Coll. Bm. and Leck. Coll. Cm.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Fusus? . sp., Hud., Geol. Mag., 1882, p. 193, pl. v., f. 1 a, h.			H						Single specimen, Hudleston Coll. Probably an elongated variety of Natica punctura. (Hudleston MS.)
Littorina : biserta, Phil., v. Amberleya.									
Phillipsii, L. & M., (Turbo), p. 117, pl. xv., f. 12, 12a, b; Hud., Geol. Mag., 1884, p. 242, pl. viii, f. 1 a, h.; Jura. Gast., p. 296, pl. xxiii, f. 16.			Wr.		H P 1	Wr. P 1 Jm	P Jm		Hud. (pl. viii., f. 1) in Leck. Coll. Some forms may be referred to Amber- leya ornata, Sow. and Amb. Meriani, Goldf. (Hud. Jura. Gast., pp. 279, 283.)
punctura, Bean, v. Natica.									•
unicarinata, Bean, Hud., Geol. Mag., 1884, p. 250, pl. viii., f. 10 a, h, c.; Jura. Gast., p. 289, pl. xxiii., f. 1.			H P						Near to L. biserta. Leck. Coll.
sp. , Hud., Geol. Mag., 1884, p. 243, pl. viii., f. 2 a, b.			H						York Museum. Near to L. Phillipsii.
Melania : coarctata, Desl., lineata, Sow., v. Chemnitzia.									' ,
procera, Desl., v. Ch. lineata.									
scalariformis, Desl., v. Cer. ve- tustum.									
striata, Sow., v. Phasianella.									
Monodonta:									
lævigata, Morris, v. Turbo, papilla, Heb. & Desl., v. Turbo lævigatus.									
Natica :									
adducta, Phil., G.Y., pl. ix., f. 30; L. & M., p. 112, pl. xv., f. 17, 17a; d'Orb., T. J., p. 189, pl. 289, f. 4, 5; Hud., Geol. Mag., 1882, p. 199, pl. v., f. 6; Jura. Gast., p. 257, pl. xx., f. 3.			H Wr. P I Jm		H Wr. P Im	P Wr. H			Hud. (pl. v., f. 6, and pl. xx., f. 3) m Sm.
adducta, var. canina, Hud., Geol. Mag., 1882, p. 200, pl. v., f. 7; Phil., G.Y., pl. xi., f. 35.			H		1				A variety of N. Lorieri, d'Orb. See Hudleston, Jura. Gast., p. 260, pl. xx., f. 9. Type in Leck. Coll.
bajocensis, d'Orb., v. N. punctura.									•
canaliculata, L. & M. (<i>Euspira</i>), p. 45. pl. xi., f. 23; Hud. Jura. Gast., p. 265, pl. xx., f. 16.			н						See note to N. cincta.
cincta, Phil., G. Y., pl. iv., f. 9; Hud., Geol. Mag., 1882, p. 197, pl. v., f. 4, 5; N. leckhamptonensis, Lyc., Cottesw. Nat. Club., i., p. 77.		- 1	H Wr.		H ₅				Type in Leeds Museum. Hud., pl. v. f. 5, is probably N. canaliculata, of which there are undoubted specimens in the Dogger. (Hudlarter MS.)
cincta, L. & M., v. Cloughtonia.			Jm						(Hudleston MS.)
insignis, Lyc., Suppl. G. O. Moll., p. 97, t. xlv., f. 21.							Ly P		

	Species.	Pass down,	Blea Wyke Beds.	Dogger.	Eiler Beck Bed,	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
p. 200, pl. v., f. 3a, b, 9. punctures, Bean, (Littorina) Mag. Nat. Hist., iii., p. 62, f. 23; La. & M., p. 112, pl. v., f. 18, 183; Hud., Geol. Mag., 1882, p. 201, pl. v., f. 10, a, b, 11, 12; ? N. ba- joceness, d'Orb., T. J., p. 189, pl. 289, f. 13, p. 189, pl. 289, f. 13, p. 189, pl. 289, f. 13, p. 189, pl. 289, f. 13, pl. v., f. 3a, 4a, 5, 5a, and 8?; Jura. Gast., p. 210, pl. xiv., f. 1b; Therritella ion- gracorda, Bean, MS. cingenda, Sow., (Turritella) M. C. t. 499, f. 3; Hud., Geol. Mag., 1888, p. 112, pl. v., f. 9, 9a; Jura. Gast., pl. xil., f. 1	leckhamptonensis, Lyc., v. N. oincta.									
Mag. Nat. Hist., iii., n. 23, 123; H. Mag. Nat. Hist., iii., n. 23, 123; L. & M., p. 112, pl. xv., f. 18, 182; Hud., Gol. Mag., 1889, p. 201, pl. v., f. 10 a, b, 11, 12; ? V. & book of the control of the	proxima, Hud., Geol. Mag., 1882, p. 200, pl. v., f. 8 a, b, 9.									A variety of N. Lorieri, d'Orb. Hudle ston Jura. Gast., p. 260, pl. xx., f. 7
Cingenda, Phil., C. Y., pl. xi., 1.28, 29; Broun, Neues Jahrb., 1884, p. 112, pl. iv., f. 19, sp., Hud., Geol. Mag., 1884, p. 114, pl. iv., f. 10, 10a. Sep., Hud., Geol. Mag., 1884, p. 114, pl. iv., f. 10, 10a. Nerita: bellulata, Bean, v. Turbo bevigatus. costata, Sow., v. N. costulata. Costulata, Bean, v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Phil., v. Neritagata, Bean, M. C., t. 483, f. 3-4; N. pseudo-costata, L. & M., p. 144, pl. iv., f. 3-3, s. lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., w. Turbo. Lavigata, Sow., v. Turbo. Lavigata, Sow., w. Tur	L. & M., p. 112, pl. xv., f. 18, 18a; ; Hud., Geol. Mag., 1882, p. 201, pl. v., f. 10 a, b, 11, 12; ? N. ba- jocensis, d'Orb., T. J., p. 189, pl.			Jm		H	н	H I Jm	C.G.	Nearly related to N. bajocensis, d'Orb See Hudleston Jura. Gast., p. 264
cingenda, Phil., G. Y., pl. xi., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 28, 29; Broun, Neues Jahrb., 1. 29; Broundard, N. C., t. 499, f. 3; Hud., Geol., Mag., 1884, p. 113, 123; Hud., Geol., Mag., 1884, p. 113; Cerithium Cartiel, Deal., Mem. Soc., Linn., Norm., vii., p. 200, pl. 11, 1. 21; Inon Heb. & Beell, id Urb., Prod. I., p. 302. Longiuscula, Bean, MS., v. N. cingenda. sp., Hud., Geol., Mag., 1884, p. 114, pl. iv., f. 10, ab; pl. yi., f. 29; Ph. yi., f. 29, 20; L. & M., p. 57, pl. viii., f. 6; Hud., Geol., Mag., 1884, p. 299, pl. ix., f. 10a, b; N. cosatata, Sow., M. C., t. 483, f. 3-4; N. pseudo-costata, L. & M., p. 14, pl. xv., f. 3. 38. Lævigata, Sow., v. Turbo. Læviga	tumidula, Phil., v. Nerita.									
1898, p. 10, pl. iv., f. 3, 3a, 4, 4a, 5, 5a, and %? Jura. Gast. p. 210, pl. xiv., f. 13; Tweritella longiuscula, Bean, MS. cingenda, Sow., (Turritella) M.C., t. 400, f. 5; Hud., Geol. Mag., 1884, p. 112, pl. iv., f. 9, 8a; Jura. Gast., pl. xii, f. a. granulata, Phil., (Terebra) G. Y., pl. vii., f. 16; I. ye., Suppl., p. 10, t. xxxi., f. 12, 12a; Hud., Geol. Mag., 1884, p. 113; Certithium tortile, Deal., Mém. Soc. Linn. Norm., vii., p. 200, pl. 11, f. 15 (non Heb. & Deal.); d'Orb., Prod. I., p. 302. longinscula, Bean, MS., v. N. cingenda. sp., Hud., Geol. Mag., 1884, p. 112, pl. iv., f. 7. pl. iv., f. 7. sp., Hud., Geol. Mag., 1884, p. 114, pl. iv., f. 10, 10a. Nerita: beilulata, Bean, v. Turbo lævigatus. costata, Sow., v. N. costulata. costulata, Desh., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; J. L. & M., p. 67; pl. viii., 16; f. Hud., Geol. Mag., 1884, p. 289, pl. ix., f. 10a, b. v. costata, Sow., M. C., t. 465, f. 3-4; N. pseudo-costata, L. & M., p. 149, pl. xv., f. 3 a. lævigata, Phil., v. Neritopsis. minuta, Sow., v. x. tirmidula, Fhil., t. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4. H. I. Wr., pl. iv., f. 25; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 298, pl. ix., f. 298, pl. ix., f. 298, pl. ix., f. 298, pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.										
M. C., t. 489, f. 3; Hud., Geol. Mag., 1884, p. 112, pl. iv., f. 9, 9a; Jura. Gast., pl. xii., f. x. granulata, Phil., (Terebra) G. Y., pl. vii., f. 16; I.yo., Suppl., p. 10, t. xxii., f. 12, 12a; Hud., Geol. Mag., 1884, p. 113; Ceri- thium tortile, Deal., Mém. Soc. Linn. Norm., vii., p. 200, pl. 11, f. 15 (non Heb. & Deal.); d'Orb., Prod. I., p. 302. longiuscula, Bean, MS., v. N. cin- genda. sp., Hud., Geol. Mag., 1884, p. 112, pl. iv., f. 7. sp., Hud., Geol. Mag., 1884, p. 114, pl. iv., f. 10, 10a. Merita: bellulata, Bean, v. Turbo lævigatus. costata, Sow., v. N. costulata. costulata, Deab., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; I. & M., p. 57, pl. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, b; N. costata, Sow., M. C., t. 443, f. 3-4; N. pseudo-costata, L. & M., p. 114, pl. xv., f. 3, 5a. lævigata, Phil., (Natica tumidata) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 298, pl. ix., f. 4-6; Nerila minuta, Sow., M. C., t. 463, f. 3, 4.	1886, p. 558; Hud., Geol. Mag., 1884, p. 110, pl. iv., f. 3, 3a, 4, 4a, 5, 5a, and 8?; Juna. Gast. p. 210, pl. xiv., f. 13; Turritella lon-	:		Wr. P 1 Jm		H?	# H?	Wr. P		N. longiuscula in York Museum.
G. Y., pl. vii., f. 16; 1,yc., Suppl., p. 10; t. xxi., f. 12, 12s. Hud., Geol. Mag., 1884, p. 113; Cerithium tortile, Deal., Mêm. Soc., Linn. Norm., vii., p. 200, pl. 11, f. 15 (non Heb.& Deal.); d'Orb., Prod. 1, p. 302. longiuscula, Bean, MS., v. N. cingenda. sp., Hud., Geol. Mag., 1884, p. 112, pl. iv., f. 7. sp., Hud., Geol. Mag., 1884, p. 114, pl. iv., f. 10, 10a. Nerita: bellulata, Bean, v. Turbo lævigatus. costata, Sow., v. N. costulata. costulata, Desh., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; 1. k. M., p. 57, p. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, pl. v. costata, Sow., M. C., t. 443, f. 3-4; N. pseudo-costata, L. & M., p. 114, pl. xv., f. 3. 3a. lævigata, Sow., v. Turbo. lævigata, Sow., v.	Mag., 1884, p. 112, pl. iv., f. 9, 9a;									Very rare. (Cerithinella, Hudleston MS.). Hud. (pl. iv., f. 9) in Leck Coll.
## Probably includes the N. pseudocostata, L. & M., p. 114, pl. xv., f. 3, 3a. Lawigata, Phil., V. Neritopsis. Lawigata, Poll., V. Neritopsis. Lawigata, Poll., v. Neritopsis. Lawigata, Poll., v. Neritopsis. H.	G. Y., pl. vii., f. 16; l.yc., Suppl., p. 10, t. xxxi., f. 12, 12a; Hud., Geol. Mag., 1884, p. 113; Ceri- thium tortile, Deal., Mém. Soc. Linn. Norm., vii., p. 200, pl. 11, f. 15 (non Heb. & Deal.); d'Orb.,							Wr. P H Jm		Very rare. Specimen in Scarborough Museum much broken, may be Phil. type.
## Probably includes the N. pseudocostata, Geol. Mag., 1884, p. 112, pl. iv., f. 10, 10a. ## Probably includes the N. pseudocostata, L. & M., p. 114, pl. xv., f. 3, 3a. **Lawigata, Sow., v. Turbo.* **Lawigata,	longiuscula, Bean, MS., v. N. cin- genda.								ľ	
## Nerinæa fasciata, Voltz." Leck. (In the probably includes the N. pset costata, Sow., v. N. costulata. **Costulata**, Desh.** Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; L. & M., p. 57, pl. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, b; N. costata, Sow., M. C., t. 463, f. 3-4; N. pseudo-costata, L. & M., p. 114, pl. xv., f. 3, 3a. **Lævigata**, Sow., v. Turbo.** **Lævigata**, Sow., v. Turbo.** **Lævigata**, Phil., (Natica tumidula**, Phil., (Natica tumidula**) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296, pl. ix., f. 4-6; Nerita minuta**, Sow., M. C., t. 463, f. 3, 4. **Merinæa fasciata**, Voltz." Leck. (In the probably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Turbably includes the N. pseudo-costata**, of Wright and Phillips' ling. Tu				· .					ı	Type in York Museum. ?=Nerinæa (Ptygmatis) campana Hudl., Jura. Gast., p. 214, pl. xv.
bellulata, Bean, v. Turbo lævigatus. costulata, Desh., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; L. & M., p. 87, pl. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., L. & M., p. 114, pl. xv., f. 3, 3a. lævigata, Sow., v. Turbo. bævigata, Sow., vi. turnidula, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296, pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.										"Nerinæa fasciata, Voltz." Leck. Coll
bellulata; Bean, v. Turbo lævigatus. costulata, Desh., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; L. & M., p. 87, pl. viii., p. 617; L. & M., p. 87, pl. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, b; N. costata, Sow., M. C., t. 463, f. 3-4; N. pseudo-costata, L. & M., p. 114, pl. xv., f. 3, 3a. lævigata, Sow., v. Turbo. lævigata, Sow., v. Turbo. lævigata, Sow., v. Turbo. lævigata, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296, pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.	Werita:	٠								
Costulata, Desh., Lam., Anim. sans Vert., 2nd Ed., viii., p. 617; L. & M., p. 87, pl. viii., 1. 6; Hud., Geol., Mag., 1884, p. 299, pl. ix., f. 10a, b; W. costata, Sow., M. C., t. 463, f. 3-4; N. pseud-costata, L. & M., p. 114, pl. xv., f. 3, 3a. lævigata, Sow., v. Turbo. lævigata, Sow., v. Turbo. lævigata, Phil., v. Neritopsis. minuta, Sow., vir. turnidula, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol., Mag., 1884, p. 296, pl. ix., f. 46; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.							İ			
sans Vert., 2nd Ed. viii., p. 617; L. & M., p. 57, pl. viii., 1. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, b; V. costata, Sow., M. C., t. 463, f. 3-4; N. pseudo-costata, L. & M., p. 114, pl. xv., f. 3, 3a. lævigata, Sow., v. Turbo. lævigata, Phil., v. Neritopsis. minuta, Sow., vár. tumidula, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296, pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.	costata, Sow., v. N. costulata.	ı								
lavigata, Phil., v. Neritopsis. minuta, Sow., yar. tumidula, H	L. & M., p. 57, pl. viii., f. 6; Hud., Geol. Mag., 1884, p. 299, pl. ix., f. 10a, b; N. costata, Sow., M. C., t. 463, f. 3-4; N. pseudo-costata,			Jm		Wr. P	Ħ			Probably includes the N. pseudo costata, of Wright and Phillips' lists Hud. (pl. ix., f. 10) in Herries Coll.
minuta, Sow., yar. tumidula, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296. pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.					ļ					
Phil., (Natica tumidula) G. Y., pl. xi., t. 25; Hud., Geol. Mag., 1834, p. 296. pl. ix., f. 4-6; Nerita minuta, Sow., M. C., t. 463, f. 3, 4.	lævigata, Phil., v. Neritopsis.									
	minuta, Sow., yar. tumidula, Phil., (Natica tumidula) G. Y., pl. xi., f. 25; Hud., Geol. Mag., 1884, p. 296. pl. ix., f. 4-6; Nerita		,	Wr. P 1 Jm						Type in York Museum. Hud. (pl. ix. 1. 4) in Jm. (f. 5) in Leck. Coll.

						1			
Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Nerita-cont.								1	
pseudo-costata, d'Orb., Prod. I., p. 264; Hud., Geol. Mag., 1884, p. 298, pl. ix, f. 7-9; Nerita costata, Phil., G. Y., 1829; Neri- topsis pseudo-costata, Phil., G. Y., pl. xi., f. 32.			H P						Confined to the Dogger. Rare. (Hud. Hud. (pl. ix., f. 7-9) in Leck. Coll.
pseudo-costata, L. & M., v. N. costulata.									
Neritopsis: Archiaci, Lyc., v. N. canaliculata.									
bajocensis, d'Orb., Prod. I., p. 264; T. J., p. 223, pl. 300, f. 8- 10; Hud., Geol. Mag., 1884, p. 300, pl. ix., f. 11 a, b, c.			Ħ						Very rare. Hud. (pl. ix., f. 11) in York Museum.
canaliculata, d'Arch (Turbo) Soc. Géol. Fr., 1843, p. 379, pl. 29, f. 6; Hud., Geol. Mag., 1884, p. 301, pl. ix., f. 12a, b; Turbo Archiaci, d'Orb., Prod. I., p. 300; T. J., ii., p. 351, pl. 334, f. 8-10; Neritopsis Archiaci, Lyc., Suppl., p. 21, pl. 31, f. 7, 7a.							H P 1 Jm 1 Ym		Rare. Lyc. (pl. xxxi., f. 7) in Leck.
1cevigata, Phil., (Turbo) G. Y., pl. xi., f. 31; Hud., Geol. Mag., 1885, p. 40, pl. ii., f. 1-3; (Nerita) Phil., 1829; ? Turbo gibbosus, d'Orb., T. J., ii., p. 342, pl. 300, f. 1-3.			H Jm				Wr?		Hud. (pl. ii., f. 1) in Leck. Coll. (f. 2) in Jm. (f. 3) in Ym. Labelled Monodonta lævigata, Phil non Sow. in Sm.
Onustus: ornatissimus, d'Orb., (<i>Trochus</i>) Prod. I., p. 264; T. J., ii., p. 273, pl. 312, f. 5-8; Hud., Geol. Mag., 1884, p. 252, pl. ix., f. 1.			H						Leck. Coll. Somewbatdoubtful if this is the true O. ornatissimus of d'Orb (Hudleston MS.)
pyramidatus, Phil., (Tro- chus) G. Y., pl. xi., f. 22; Hnd., Geol. Mag., 1884, p. 294, pl. ix., f. 2-3; Trochus lamellosus, d'Orb., T. J., ii., p. 270, pl. 311, f. 11-18.			H Wr P						Type in York Museum. Hud. (pl. ix. f. 3) in Leck, Coll. Some specimens should probably he referred to O. ornatissimus (Hud loc. cit., p. 294).
Patella: lævis, Sow., v. Discina reflexa.									
sp.		ı	Ym					Ì	Yellow sands of Glaizedale.
Phasianella: cincta, Phil., v. Cloughtonia.			1						
conoidea, Hud. Jura. Gast., p. 254, pl. xix., f. 14a.			н	,		н			Rare.
latiuscula, L. & M., p. 117, pl. xv., f. 16; Hud., Geol. Mag., 1884, p. 50; Jura. Gast., p. 251.						H P			Doubtful species. May be the cast o Natica bajocensis. (Hud.)
Sæmanni, Oppel., v. Ph. striata.		ł				1			
striata, Sow, (Melania) M. C., t. 47; L. & M., p. 118, pl. xv., f. 19; Hud., Geol. Mag., 1884, p. 49; Ph. Sæmanni, Oppel, Jura, p. 387; Bourquetia striata, Terq. & Jourdy, Bath. Mos., p. 51, pl. ii., f. 21-23.						Ħ		P	Bourguetia striata. See Hudleston Jura. Gast., p. 249. See also Tab. III There is some doubt whether this i the same as the Corallian species.
Pterocera, v. Alaria.		Ì				-			

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Pleurotomaria :									
anglica, Sow. v. Tab. I.	L.L	H ?	Ħ						Hud. (pl. iv., f. 5) in Ym.
granulata, Lyo., Suppl., p. 24, pl. 31, f. 8 (non Sow.); Hud., Geol. Mag., 1885, p. 127, pl. iii., f. 8-10.							H P	C.G.	Closely allied to Pl. Münsteri. Type and Hud. (pl. iii., f. 8, 9) in Leck. Coll. (f. 10) in Ym.
Pseudalaria:							Jm		
 jugosa, Bean, MS., Hud., Jura. Gast., p. 190, pl. xii., f. 9; (Trochus), Hud., Geol. Mag., 1885, p. 255, pl. v., f. 11, 11a. 			Ħ						Very rare.
Purpurina: condensata, Heb. & Desl., v. Tab. III.							Wr? H P?	Kel	Turbo elaboratus of some Cornbras l lists.
elaborata, Bean, (Turbo), Lyc Ann. Nat. Hist., vi., p. 416, t. ii., f. 1; L. & M., p. 64, pl. ix., f. 27; p. 116, pl. xv., f. 2; Hud., Jura. Gast., p. 85, pl. 1, f. 1; P. elabo- rata, var. bajocensis, Hud., Geol. Mag., 1882, p. 195, pl. v., f. 2.			Ħ		Wr. 1 P 1 H 1	Wr.			Type in Beau Coll. Bm. Hud. (pl. i., f. 1) in Leck. Coll.
Rostellaria, v. Alaria.								1	
Solarium: calix, Phil., v. Trochotoms.									
granatum, Bean, v. Turbo.							İ		
Terebra: granulata, Phil., v. Nerinæa.									
vetusta, Phil., v. Cerithium.									
Tornatella, v. Actæonina.				1					
Trochotoma: calix, Phil., (Solarium) G. Y pl. xi., f. 30; Hud., Geol. Mag., 1885, p. 156, pl. iv., f. 6, 6a, b; T. gradus, Desl., Mom. Soc. Linn. Norm., vii., p. 106, pl. 8, f. 4-7; Ditremaria bicarinata, d'Orb., T. J., p. 380, pl. 340; f. 8-11.			H 1 W1 1 P 1 Jn 1 S 3						Type in York Museum.
gradus, Desl., v. T. calix.									,
Trochus:									
acmon, d'Orb., v. Turbo lævigatus.									
anglicus, Sow., v. Pleurotomaria.									
angulatus, Goldf., Petref., iii., p. 56, t. 180, f. 7.							P		
bisertus, Phil., v. Littorina.		ĺ							
dimidiatus ?, Sow. M. C., t. 181, f. 4; Hud., Geol. Mag., 1885, p. 58, pl. ii., f. 15.		H							Single specimen, Leck. Coll.

			1	, ,	1	1	ı		
Species.	Pass down.	Blea Wyke Beds.	Dogger.	El ler Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Trochus—cont. jugosus, Bean, v. Pseudalaria. Labadyei, d'Arch., v. Turbo lævigatus.									
lamellosus, d'Orb., v. Onustus pyramidatus.									
? Leckenbyi , L. & M., p. 115, pl. 15, f. 21; Hud., Geol. Mag., 1885, p. 126, pl. iii., f. 7.						H			? Pleurotomaria. Leck. Coll.
monilitectus, Phil., G. Y., pl. ix., f. 33; Hud., Geol. Mag., 1885, p. 121, pl. iii., f. 1, 1a, b.					P	Wr. Hi? Jm	Be Wr. H		Cornbrash form is a variety. Type in York Museum.
ornatissimus, d'Orb., pyramidatus, Phil., }v. Onustus.						•	•		
scarburgensis, Hud., Geol. Mag., 1885, p. 123, pl. iii., f. 2, 2a.							H		? variety of T. strigosus. Leck. Coll.
strigosus, Lyc., Suppl., p. 29, pl. xlv., f. 12: Hud., Geol. Mag., 1885, p. 124, pl. iii., f. 3-4.							H P 1 Jm		Type in Leck. Coll.
subglaber, Hud., Geol. Mag., 1885, p. 125, pl. iii., f. 6, 6a.			,				H 1		Near to T. Dunkeri, L. & M. Single specimen in Leck. Coll.
Turbo: Archiachi, d'Orb., v. Neritopsis canaliculata.									
armigera, Lyc., v. Amberleya.		}							
canaliculatus, d'Orb., v. Neritopsis. elaboratus, Bean, v. Purpurina.									
funiculatus, Pbil., v. Tab. III.; Hud., Geol. Mag., 1885, p. 54, pl. ii., f. 7, 8.			H			;	Be H	C.R.	The Lower Oolité spécies are varieties. Hud. (pl. ii., f. 7, 8) in Leck. Coll.
granatus, Hud., Geol. Mag., 1885, p. 55, pl. ii., f. 9-12; (Delphi- nula) and (Solarium), Bean, MS.			H Jm					,	Types in Bm., Cm., and Ym.
lævigatus, Sow., (Nerita) M. C., t. 217, f. 1; Hud., Geol. Mag., 1885, p. 52, pl. ii., f. 4-6; (Monodonta), Morris, Cat., Nerita bellulata, Bean; Trochus Labadyei, d'Arch, Soc. Géol. Fr., v., pt. 2, p. 379, pl. 29, f. 2, 2a; Trochus acmon, d'Orb., T. J., p. 278; pl. 314, f. 1-4; Monodonta papilla, Heb. & Desl., Bull. Soc. Linn. Norm., 1869, pl. 3, f. 1; Crysostoma ovulata, Heb. & Desl, Laube, Gast. von Balin, p. 13, pl. 3, f. 3.			H Wr. Jm.					3	The following three varieties are given by Hudleston:— var. bellulata, Bean, f. 4. var. B. f. 5. var. ovulata, Heb. & Desl., f. 6, in Leck. Coll.
lævigatus, Phil., v. Neritopsis. ?melanioides, Bean, Hud., Geol. Mag., 1894, p. 251, pl. viii., f. 12, 12a.			H						York Museum.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Bller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Turbo—cont. Phillipsii, L. & M., v. Littorina. sp. "gemmuliferus," Hud., Geol. Mag., 1885, p. 57, pl. ii., f. 13. sp. "lævior," Hud., Geol. Mag., 1895, p. 53, pl. ii f. 14. Turritella: cingenda, Scw., v. Nerinæa.			H 1		1				Single specimen, Bean Coll. Bm. Single specimen, Bean Coll. Bm.
clongata, Ziet., v. T. opalina. longiuscula, Bean, v. Nerinæa cingenda. opalina, Quenst., var canina, Hud., Geol. Mag., 1884, p. 200, pl. vii., f. 9-10; T. clongata, Ziet., pl. 32, f. 5, 6; T. opalina, Quenst., Jura, p. 326, t. 44, f. 15. quadrivittata, Phil., (Cerithium) G. Y., pl. xi., f. 23; Hud., Geol. Mag., 1884, p. 202, pl. vii., f. 11-12. sp. Hud., Geol. Mag., 1884, p. 203, pl. vii., f. 13, 13a.		н	H 1 Wr.	S?	H Wr.	0.4			May be separate species. Hud. (pl. vii., f. 10) in Leck. Coll. Hudleston refers the Millepore specimens to <i>T. opalina</i> . Type in York Museum. Hud. (pl. vii., f. 12) in Leck. Coll. Near to <i>T. quadrivittata</i> . Leck. Coll.
CEPHALOPODA. Ammonites: aalensis, Ziet., v. Tab. I. "Blagdeni, Sow., M. C., t. 201; d'Orb., T. J., p. 396, pl. 132; T. & M., p. 110, pl. xiv., f. 3 a, b; Am. coronatus, Ziet., Pet. Würt., t. 1, f. 1; Quenst., Jura., t. 54, f. 1. Braikenridgii, Sow., M. C., t. 184; d'Orb., T. J., p. 400, pl. 135, f. 3-5; L. & M., p. 111, pl. xiv., f. 1; Quenst., Jura., t. 54, f. 5. Brocchii, Sow., M. C., t. 202; Am. contractus, Sow., M. C., t. 500, f. 2. comensis, Von Bucb, v. Tab. I. contractus, Sow., v. Am. Brocchii. coronatus, Ziet., v. Am. Blagdeni. coronatus oolithicus, Quenst., v. Am. subcoronatus. corrugatus, Sow., v. Am. Murchisonæ. Herveyi, Sow., v. Am. macrocephalus. humphriesianus, Sow., M. C., t. 500, f. 1; Ziet., Würt., p. 39, pl. 133, 134, 135, f. 1?; Queust., Jura, t. 54, f. 2-4.		Wr T			P	Wr. Jm I H I Wr. Sm I			Phillips gives this as a characterist Millepore species.

Species.	Pass down.	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
Ammonites—cont. inornatus, Will., v. Am. insignis. insignis, Schüb., v. Tab. I.	Ju	Wr. T S							·
jurensis, Ziet., v. Tab. I. læviusculus, Sow., v, Am. Murchisonæ.	Ju	Т							
macrocephalus, Schloth., Min. Tascb., 7, p. 70; Petref., p. 70; Ziet., Würt., t. v., f. 1, 4, 7; xiv., f. 3; d'Orb., T. J., p. 430, pl. 151; L. & M., p. 109, pl. xiv., f. 2; Quenst., Jura, t. 64, f. 15, Am. Herveyi, Sow., M. C., t. 195; Bronn., Leth. Geog., p. 455, t. 23, f. 11; d'Orb., T. J., p. 428, pl. 150; Am. terebratus, Phil., MS.							Be Wr. P 1 Jm H	Kel	Also in the Cb. clay. (Leck.)
Murchisonæ, Sow., M. C., t. 550; d'17h, T. J., p. 867, pl. 120; (Ludwigia) Buck., Inf. Ool. Am., p. 16, pl. 1, ii, iii; Am. læviusculus, Sow., M. C., t. 451, f. 1, 2; Am. corrugatus, Sow., M. C., t. 451, f. 1, 2; Am. corrugatus, Sow., M. C., t. 451, f. 3.		H	P T H?						·
niortensis, d'Orb., v. Am. Parkin- aoni.								1	
Parkinsoni, Sow., M. C., t. 307; d'Orb., T. J., p. 374, pl. 122; Ziet. Würt., p. 14, pl. 10, f. 7; A. niortensis, d'Orb., T. J., p. 372, pl. 121, f. 7-10.						Wr.			White Nab. Iu Scarborough Museum.
subcoronatus, Oppel, Jura., p. 376; Am. coronatus colithicus, Quenst., Ceph., t. 14, f. 4.						O			? variety of Am. Blagdeni.
terebratus, Phil., v. Am. macro-cepbalus.									
Belemnites: aalensis, Voltz, Obs. aur les Bel., p. 60, pl. iv., pl. vii., f. 1; Phil., Brit. Bel., p. 98, pl. xxii., f. 54; G. Y., pl. xxvi., f. 9.						P I Jm			
anomalus, Phil., Brit. Bel., p. 104, f. 26; G. Y., pl. xxvi., f. 6.						P 1 Jm			Type in Bm.
Bucklandi, Phil., Brit. Bel., p. 53, pl. viii., f. 18; G. Y., pl. xxvii., f. 13; B. ovalis, Buckland, Geol. and Min., (Bridgew. Treatise), vol. ii., p. 69, pl. xliv., f. 7, 8; p. 71, pl. xli., f. 7, 8.		P				1			
compressus, Blainv., v. B. inornatus.		1							
eompressus, Sow., v. B. quinque- sulcatus.									
digitalis, Blainv., v. B. irregularis.									

	j.	e Beds.		k Bed.	Bed.	estone.	انے		
Species.	Pass down	Blea Wyke Beds.	Dogger.	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash	Pass up.	Remarks.
delemnites-cont.									
giganteus, Schloth., 1813, Taschenb., 7, p. 70; Petref., p. 45; Phil., Brit. Bel., p. 98, pl. xxiii., f. 55.			T.			Wr. H S			Prof. Phillips includes this under Beaalensis in the text, although h keeps them separate in the plates.
inornatus, Phil., Brit. Bel., p. 80, pl. xviii., f. 46; G. Y., pl. xxvii., f. 10; B. compressus, Blainv., Bel., p. 84, pl. ii., f. 9.		P T Wr.							Probably includes the B. compressu. Voltz., of Dr. Wright, Q. J. G. S. xvi., p. 4. This species might be called B. Voltzi var. inornatus. See Phil. Brit. Bel pp. 81, 82.
irregularis, Schloth., Taschenb., p. 70, pl. iii., f. 2; Petref., p. 48; d'Orb., T. J., p. 74, pl. iv., f. 2-8; Phil., Brit. Bell., p. 72, pl. xv., f. 37, 39; B. digitalis, Blaiuv., p. 88, pl. iii., f. 5, 6; Voltz., p. 46, pl. ii., f. 5; Quenat., Ceph., p. 416, pl. xxvi., f. 1-8.		Wr. T			<i>t</i>				
Milleri, Phil., v. Tab. I.	M.L	. Р							
ovalis, Buckl., v. B. Bucklandi.		l							
quinquesulcatus, Blainv., Mém. sur les Bel., p. 83, pl. ii., f. 8; Phil., Brit. Bel., p. 100, pl. xxiii., f. 58; pl. xxiv., f. 57; G. Y., pl. xxvi., f. 7, 8; B. com- pressus, Sow., t. 590, f. 4. tornatilis 7, Phil., v. Tab. III.						P 1 3 8	2		Carlton Husthwaite. Given by Bean, Wright, and Lecter on the clays of the Cornbrast but stated by Phillips to be an error See Brit. Bel., p. 109; also note the cornbrast of the cornbrast of the cornbrast of the cornbrast of the carbon but stated by Phillips to be an error of the cornbrast of the cornbrast of the carbon but stated by Phillips to be an error of the cornbrast of the cornbrast of the carbon but stated by Phillips to be an error of the cornbrast of the cornbrast of the carbon but stated by Phillips to be an error of the carbon but stated by Phillips to be an error of the cornbrast
		1							Leckenby, Proc. Cottesw. Club, 186 p. 208, and vol. i., p. 263, of the
Tautilus : hexagonus, Sow., v. Tab. III.					Ì		Wr.	c.o.	memoir.
lineatus, Sow., M. C., t. 41.		1	P						
sp.		ŀ	Ym			İ			
		1	1						
PISCES.		ı							
Asteracanthus: ornatissimus, Ag., 3, p. 31, t. 8, Strophodus subreticulatus, Ag., 3, p. 125, t. 18, f. 5–10; A. S. Wood- ward, Cat. Foss. Fish., pt. i., 1889, p. 307.					Ym 5			C.G.	
Ischyodus: sp.					Mn	1			
		İ			*				The teeth which have been and
Strophodus: favosus, Ag., v. S. magnus.									The teeth which have been referr to this genus probably belong
magnus, Ag., 3, p. 126, t. 18, f. 11-15; (Psammodus), Owen, Odont., p. 59, t. 17, f. 3; t. 20, 21; S. Bigauxi (Sauvage), Platnauer, Proc. York. Phil. Soc., 1886, p. 36, pl. i., f. 1, 2; S. favosus, Ag., p. 175.					Ym	1	Ym		Asteracanthus. Platnauer (pl. i., f. 1, 2) in Yo Museum.
Rigauxi, Platnauer (? Sauvage), v. S. magnus.									,
subreticulatus, Ag., v. A. ornatissi- mus.		1						1	

Species.	Pass down.	Blea Wyke Beds.	Dogger,	Eller Beck Bed.	Millepore Bed.	Grey Limestone.	Cornbrash.	Pass up.	Remarks.
REPTILIA. Cetiosaurus: longus, Owen, Brit, Assoc, Rep., 1841, p. 101; Foss. Rept., 1875, p. 27, pl. x.						P			White Nab. Metatarsal bones in the Scarborough Museum.
Ichthyosaurus : sp. Plesiosaurus : sp.						Wr.			,

Since the above tables were in type the following species of ammonites from Blea Wyke have been recorded by S. S. Buckman:—

- Ammonites affinis, Seebach, Hann. Jura, pl. viii., f. 4; (Hudlestonia) Buckman, Inf. Ool. Am., p. 228, pl. xxxviii., f. 1-8.
- Ammonites costula, Reinecke, (Nautilus) Naut. et Argon., f. 33, 34; (Dumortieria) Buckman, Inf. Ool. Am., p. 237, pl. xxxvii., f. 12-15.
- Ammonites Orbignyi, Buckman (Grammoceras) Inf. Ool. Am., p. 184, pl. xxvii., f. 3-6; Am. radians, d'Orb. T. J., pl. lix.; Chap. & Dew., Foss de Lux., pl. x., f. 3.
- Ammonites Sinon, Bayle, (Ludwigiu) Expl. carte géol. Fr., vol. iv., pt. 1, pl. lxxxiii., (Hudlestonia) Buckman, Inf. Ool. Am., p. 227, pl. xxxviii., f. 13-16.

TABLE III.

MIDDLE AND UPPER OOLITE SPECIES.

TABLE III.

MIDDLE AND UPPER OOLITE SPECIES.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lat.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remárks.
PLANTÆ.											
Lraucarites:											
Hudlestoni , Carr., Q. J. G. S., vol. xxxiii., p. 402, pl. xvii., f. 1, 2, 3.					H						Type in York Museum.
Carpolithes:		1							1		
AEEOLATUS, L. & H., iii., pl. 227 B.								7	l		"Oolite of Scarborough
Bucklandi, L. & H., iii., pl. 189, f. 3, 5; Phil., G. Y., p. 232, Lign. 65a.				Ym 5				P			(Buckland). Leck, Coll.
conicus, L. & H., iii., pl. 189, f. 1, 2, 4; Pbil., G. Y., p. 232, Lign. 65b.				H ₅	H			P Jm			
plenus, Phil., Thames Valley, pl. xiii., f. 1.					H			ľ			
Cycadaceæ?		L							l		
sp.		Le			İ				1		,
Zamiæ :		1_						•	1		
sp.		H						1	ŀ		
		1						1			
ANIMALIA.		1					İ				
SPONGIDA.									1		The type form of this, whi
Geodites v. Rhaxella perforata. MANON:		1						ŀ	ı		C. O. of Malton, is in to Woodwardian Mus.
FOLIACEUM, M'Coy, Ann. N.H.,				H					l	1	Cambridge. Dr. Hinde i
1848, p. 399.	ļ	1		1				1			men belongs to the gen
SP.			1	H		1		1	1		from the Upper Chalk
Peronella:									1	ļ	Flamborough.
cylindrica, Goldf. (Scyphia) Petref. t. 3, f. 12; M'Coy, Ann. N.H., 1848, vol. ii., p. 418; (Peronella) Hinde, Cat. Foss. Sponges, Brit. Mus., p. 167, pl. 33, f. 4.								P			Coralline Colite, Malt (M'Coy).
Rhaxella:								1			
perforata, Hinde, Q. J. G. S., vol. xlvi., p. 59, pl. vi.; Renulina Sorbyana, Blake, Trans. B. Mic. Soc., 1876, p. 262; (Geodites) Sollas, Aun. Mag. N. H., 1880, p. 392; Spongia fovata, Bean MS.				Sm Ym	[H					Scarborough and York M seums. These are made of the globate or renifor bodies described by Sorl Q. J. G. S., vol. vii., p. i. Type in York Museum.
Sollas Ann. Mag. N. H., 1880, D.				Yn	[H					of the globate bodies describe Q. J. G. S., vol.

SPECIES.	n.	s Rock.	ay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.		U.C.G. and Cement Stone.	Oolite.	e Clay.	an Beds.	Remarks.
	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc	Mid. Cale	Coral Rag.	U.C.G. an	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	
1			1			and the same of	1				
Spongia: Floriceps, Phil., G. Y., pl. iii., f. 8.	Cb			P i H		-					Type not known. Probably Stellispongia corallina, of St. glomerata.
fovata, Bean MS., v. Rhaxella perforata.				ī		'] 	Lower Calc. Grit., York Museum.
Stellispongia :											
corallina, Fromentel, (Engulo- fungia) Introduction à l'Étude des Ep. foss., 1859, p. 48, pl. 3, f. 11; Hinde, Cat. Foss. Spg. Brit, Mus., p. 185, pl. 35, f. 3, 3a, 3b.	Clo?	2 Street	,	Ḥ i						,	Coral Rag of Suffield (Hinde) In Scarborough and York Museums, labelled Sp. flori- ceps.
glomerata, Quenst., (Spongites) Der Jura, p. 695, pl. 84, f. 10, 11; Hinde, Cat. Foss. Spg. Brit. Mus., p. 187.	. "	4		Sm?			-	;			In Scarborough Museum labelled Sp. floriceps. Re- sembles Phillips' figure pl. iii., f. 8.
semicincta, Quenst., (Spongi- tes) Petref. Bd. 5, p. 214, pl. 125, f. 2-9; Hinde, Cat. Foss. Spg. Brit. Mus., p. 187.		;		Cm?							In the Woodwardian Museum at Cambridge, from the "Coral Rag at Scarborough," labelled Sp. floriceps.
CŒLENTERATA (ACTINOZOA).							'				
Anthophyllum: obconicum, Goldf., v. Montlivaltia dispar.											
Astrea:					;	ı					
concinno, Goldf., v. Thamnastræa.					ľ	ľ					
explanato, Goldf., v. Isastræa.		ľ						}			
favosoïdes, Phil., v. Isastræa explanata.											
inæqualis, Phil., v. Isastræa.						1					
micraston, Phil., v. Thamnastræa concinna.											
tubulifera, Phil., v. Stylina.											
varians, Röm., v. Tbamastræa concinna.											
Caryophyllia : annularis, Flem., v. Thecosmilia.			İ								
cæspitosa, Conyb. & Phil., v. Clado- phyllia Conybearii.											
cylindrica, Phil., v. Thecosmilia annularis.								- Control			
flexuosa, Phil., v. Rhabdophyllia Phillipsi.									İ		

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low, Calc. Gr. and Low. Lst.	Mid, Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds,	Remarks.
(ACTINOZOA)—cont. Cladophyllia: Conybearti, M. Edw., p. 91, t. xvi., f. 2, 2 a, b, o; Phil., Thames Valley, pl. xiii. f. 5; Caryophyllia caspitosa, Conyb. & Phil., Geol. of Eng., p. 183; Phil., G. Y., 1829, p. 126; Lithodendron dichotomum, M'Coy., Ann. N. H., 1848, p. 418. Comoseris: irradians, M. Edw., p. 101, t. xix., f. 1: Meandrina, Phil., 1829; Siderastrea meandrinoides, M'Coy., Ann. N. H., 1848, p. 419. Dentipora: glomerata, M'Coy., v. Stylina tubulifera. Explanaria: flexuosa, Flem., v. Thsmnastræs arachnoides.	r		1		S ₁ H ₂	H 5					
Goniocora: socialis, Röm., (<i>Lithodendron</i>) Verst. Ool. Nachtr., p. 57, t. xvii., f. 23; M. Edw., p. 92, t. xv., f. 2, a, b.						Ĥ					In Scarborough Museum.
Gonioseris: irradians, Phil., v. Comoseris. Isastræa: explanata, Goldf., (Astrea) Petref. 1, p. 112, t. 38. f. 14; M. Edw., p. 94, t. xviii., f. 1, a, b, c, d; Madrepora ananas, Y. & B., 1828, p. 205, t. iv., f. 2; Astrea favosoides, Phil., G. Y., pl. iii., f. 7.				H		P 5 H 7					
inæqualis, Phil., (Astrea) G. Y., 1829, p. 126; 1875, p. 236; M. Edw., p. 104. Latimæandraræa: decorata, Bean, Tomes, Q. J. G. S., 1883, vol. xxxix, p. 562, pl. xxii., f. 7-10, 15; Meandrina decorata, Bean MS. Lithodendron: dichotomum, M'Coy, v. Cladophyllia Conybearii. Edwardsii, M'Coy, v. Bhabdophyllia Phillipsii.	And the second s					Ps		Bo			

	1 3		1					1		<u> </u>	
Species.	Pass down,	Kellaways Rook.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Rewarks.
(ACTINOZOA)—cont.											
Madrepora: ananas, Y. & B., v. Isastræa explanata.											
arachnoides, Park., v. Tham- nastræa.											
Meandrina, Phil., v. Comoseris.											
decorata, Bean, v. Latimæandraræa.											
Montlivaltia: dispar, Phil. (Turbinolia) G. Y., pl. iii., f. 4; M. Edw., p. 80, t.xiv., f. 2, 2a; "Flower-shaped madre- pore," Y. & B., 1822, p. 195, t. iv., f. 8; "Turnip-shaped madrepore," Y. & B., 1828, p. 204, t. iv., f. 11; Anthophyllum obconicum, Goldf., Petref., t. 37, f. 4.						H 3 5 S 2		P			
Rhabdophyllia: Edwardsii, M'Coy, v. Rh. Phillipsi.											
Phillipsi, M. Edw., p. 87. t. xv., f. 3, a, b, c; Phil., Thames Valley, pl. xiii., f. 11; Caryophyllia flexuosa, Phil., G. Y., 1823, p. 128; Lithodendron Edwardsii, M'Coy, Ann. Nat. Hist., 1848, p. 419 (non Mich.).				H P	H	H ₇					
Siderastrea: agariciaformis, M'Coy, v. Tham- nastrea arachnoides.	ŀ										
meandrinoides, M'Coy, v. Comoseris irradians.											
Stylina:								ŀ	l		
tubulifera, Phil., (Astrea), G. Y., pl. iii., f. 6; M. Edw., p. 76, t. xiv., f. 8; Stylina tubulosa, Michelit, Icon. Zooph., p. 97, pl. xxi., f. 6; Dentipora glomerata, M'Coy, Ann. Nat. rist., 1848, p. 399.						H 3 5		Ps			D. glomerata is in the Leck. Coll.
tubulosa, Mich., v. St. tuhulifera.		ĺ									
Thamnastræa: arachnoides, Park., (Madrepora) Org. Rem., ii., p. 54, t. vi., f. 4, 6; t. vii., f. 11; M. Edw., p. 97, t. xvii., f. 1; Explanaria fleavaosa, Flem., Brit. Anim., p. 510; S'derastrea agariciaformis, M'Coy., Ann. N. H., 1848, p. 401.					H	P 5 H 7					

	1	•	1		1 .	1					<u> </u>
Sprcies.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lat.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite,	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Actinozoa)—cont. Thamnastræa—cont. concinna, Goldf., (Astrea).				н		н					
concinna, Goldf., (Astrea). Petref., p. 64, t. xxii., f. 1 a; M. Edw., p. 100, t. xviii., f. 3, 8 a, b, c; Astrea micraston, Phil., 1829, p. 126; Astrea varians, Röm., Verst. Ool., p. 23, t. 1, f. 10, 11.				1		P 1 S 1 Jm					
ROTATA (AGARICIA), Goldf.								M ₅	·.		Malton. (Siderastrea, M'Coy, Ann. Mag. Nat. Hist., 1848, p. 419.) We have been unable to verify this determination.
Thecosmilia: annularis, Fleming, (Caryophyllia), Brit. Anim., p. 509; M. Edw., p. 84, t. xii., f. 1; t. xiv., f. 1; Madrepora, Smith, Strata ident., p. 20, f. 1, 2, 3; Park., Org. Rem., ii., t. v., f. 5; C. cylindrica, Phil., G. Y., pl. iii., f. 5.				H		H ₂ 3 5 P ₁ 5 S					
Turbinolia: dispar, Phil., v. Montlivaltia.						5					
ECHINODERMATA (ECHINOIDEA).		1							l		
Acrosalenia: decorata, Haime, (Milnia) Ann. Sci. Nat., 1849, p. 217, pl. 3, f. 1-3; Wr., Ann. Nat. Hist., 1851, p. 81; Forbea, Geol. Survey, Dec. iv., pl. 3; Wright, Ool. Echin, p. 249, pl. xvii., f. 1.				Ħ				Wr.			
Arbacia: hieroglyphica, Ag., v. Glypticus.					:						
Cidaris: Blumenbachii, Goldf., v. C. florigemma.											
coeonata, Goldf.											"Cor. Yorkshire" (Morris' Cat.). Foreign species. C.
diadema, Y. & B., v. Pseudodiadema hemisphericum.											apecies meant.
florigemma, Phil., G. Y., pl. iii., f. 12, 13; Wright, Ool. Echin., p. 44, pl. 2, f. 2; pl. viii., f. 4; Cidarites elongatus, Rom., Verst. Ool., p. 27, pl. i., f. 14; Cidaris Blumenbachii, Goldf., Petref., p. 117, t. 39, f. 3 c, d, e, (aculei non testa); Ag., Echino. Suisse, p. 56, t. 20, f. 5, 6.		,			H 5 8 5	H 2 3 5 S 2 . 5 Wr. 5		P 1 5			
intermedia, Fleming, v. Hemicidaris.	,										
T	,	-	. '								

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst,	Coral Bag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(ECHINOIDEA)—cont.											
monilipora, Phil., v. Pseudo- diadema hemisphæricum.											
papillata, Park., v. Hemicidaris intermedia.										İ	
Smithii, Wright, Ool. Echin., pp. 50, 451, pl. ii., f. 1; pl. iv., f. 5.				H	H 2 S	H 1 5 S 1		Wr. P			
Cidarites: elongatus, Röm., v. Cidaris flori- gemma.					•	2					
pseudodiadema, Lam., v. Pseudo- diadema hemisphæricum.											
Clypeaster, v. Pygurus.					ĺ						
Clypeus:			ĺ			l		i			
dimidiatus, Phil., v. Echinobrissus. emarginatus, Phil., v. C. subulatus.											
subulatus, Y. & B., (Echinites) pl. vi., f. 11; Wright, Ool. Echin, p. 382, pl. xxxiv., f. 1; C. emargi- natus, Phil., G. Y., pl. iii., f. 18; Nucleolites emarginatus, Forbes, Geol. Survey, Dec. 1, descrip. of pl. 9, p. 8; Pygwrus emargina- tus, Desor, Syn. Echin, p. 316.								Wr. P 1 Jm		-	Coralline Oolite of Malton, Ayton, and Scarhorough.
Collyrites:											
bicordata, Leske, (Spatangites) Dis. Nat. Echimo, p. 244, t. 42, f. 6; Desor, Syn. Echim. Foss., p. 204; Wright, Ool. Echim., p. 318, pl. xxii f. 2; Spatangites avalis, Park., Org. Rem., vol. iii, t. 3. f. 3; Y. & B., pl. vi., f. 9; (Spatangus ovalis) Phil., G. Y., pl. iv., f. 23; Dysaster propin- quus, Desor, Mon. Dys., p. 14, t. 3, f. 24-26; D. trumatus, Desor, Mon. Dys., p. 17, t. 13, f. 8-11; Dysaster ovalis, Morris, Cata- logue.		P		H 1 5 P 5 S 5		H 5		P 3 5			Coralline Oolite of Oswald- kirk, Malton. Phil. (pl. iv., f. 23) in York Museum.
Diadema:											
pseudodiadema, Ag., v. Pseudo- diadema hemisphæricum.											
subangulare, Ag., v. Pseudodiadoma versipora.			-								
versipora, Woodward, v. Pseudo- diadema.											
Discoidea : depressa, Ag., v. Holectypus.											

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag,	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	REMARKS.
(ECHINOIDEA)—cont. Dysaster: ovalis, Morris, propinquus, Desor, truncatus, Desor. Echinanthites: orbicularis, Y. & B., v. Pygurus											
pentagonalis. Echinites: depressus, Leske, v. Holectypus. subulatus, Y. & B., v. Clypeus. toreumaticus, Leske, v. Glypticus hieroglyphicus.											
Echinobrissus: dimidiatus, Phil (Clypeus) G. Y., pl. iü., f. 16; Wright, Ool. Echin., p. 350, pl. xxvi., f. 3; Nucleolites dimidiatus, Auct.				Wr?		Wr		Wr.			Brows Quarry, Malton; and Hildenley (Wright).
Nucleolites dimidiatus, Auct. scutatus, Lom., (Nucleolites) Aoim, saus Vert., t. iii., p. 36; N. scutatus, Goldf., Petref., p. 140, t. xliii., f. 6; Ag., Echino. Suisse, p. 45, t. vii., f. 12, 21; Wright, Ool. Echin., p. 346, pl. xxxvi., f. 2; N. clunicularis, var. a, Forbes, Geol. Survey, Dec. 1, pl. 9.				H 1 2 3 5 Wr. 1 S 1 2 5 Jm 1	H 1 2 3 5 S 1 5	H		Jm			
sp.?				P.	-				l		"Cf. E. clunicularis." Bl. & H., Q. J. G. S., xxxiii., p. 331.
Echinus:											
gyratus, Ag., v. Stomechinus.											
hieroglyphicus, Goldf., v. Glypticus.											
petallatus, M'Coy, v. Stomechinus gyratus.	Aprilla Miller							10.10			
Galerites :	1							1			
depressus, Desl., v. Holectypus.		•						Ĭ,	1		1

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SPECIES	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Cale. Gr. and Upper Lst	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(ECHINOIDEA)—cont.		ĺ									
Glypticus:		ı							ľ		
hieroglyphicus, Goldf., (Echimus) Petref., p. 126, t. 40, f. 17; Ag., Echimo. Suisse. 2 pt. p. 96, pl. 23, f. 37-39; Bronn, Leth. Geog., ii., p. 146, pl. 17, f. 4; Cotteau, Etud. Echim., p. 95, t. 16, f. 1-3; Wright, Ool. Rehin., p. 186, pl. xiii., f. 3; Echimites toreumaticus, Leske, Add. Klein. Echino., p. 186, pl. 44, f. 2; Arbacia hieroglyphica, Ag., Prod. Mon. Echino., p. 23.						H 3 5		Wr. 5 P 5			C. O. Malton.
Hemicidaris:											
intermedia, Fleming, (Cidaris) Brit. Anim., p. 478; Forhes, Geol. Survey, Dec. iii., pl. 4; Wright, Ool. Echim., p. 92, pl. v., f. 1; Phil., G. Y., pl. iii., f. 14; C. papillata, Park., Org. Rem., iii., p. 14, pl. i., f. 6; pl. iv., f. 20; Y. & B., pl. vi., f. 1.						H 7 P 5		Wr.			C. O. Malton.
Hemipedina :	and the second										
corallina, Wright, Ool. Echin., p. 163, pl. xii., f. 1.								Wr. 5 P.			C. O. Malton (Bean.) Very
Holectypus :											
depressus, Leske, (Echinites) Add. Kl. Echin., p. 164, pl. 41, f. 5, 6; Bronn & Röm, Leth. Geog., ii., p. 148, t. 17, f. 5a, h; Wright, Ool. Echin., p. 260, pl. xviii., f. 1; Galerites depressus, Desl., Ency. Meth., t. 162, f. 7, 8; Goldft., Petref., p. 129, t. 41, f. 3; Phil., G. Y., pl. vii., f. 4; Koch & Dunker, Nord. Ool., p. 40, t. 4, f. 2a, h; Discoidea depressa, Ag., Echino. Suisse, p. 88, t. 13, f. 7–13; Desor, Mon. de Gal., p. 65, t. 10, f. 4–12.	M	Ø		H 1 5 8 5 5	н	н					
oblongus, Wright, Ool. Echin., p. 267, pl. xviii., f. 3.				P 1 H 3				Wr.			C. O. Multon, (Rare.)
Milnia:											
decorata, Haime, v. Acrosalenia.									·		
Nucleolites :						ļ					
clunicularis, Forhes, v. Echino- brissus scutatus.											
dimidiatus, Auct., v. Echinohrissus.											
marginatus, Forbes, v. Clypeus subulatus.											
		1			ļ			ı			

Species,	Pass down.	Kellaways Rock,	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Ozlite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(ECHINOIDEA)—cont. Nucleolites—cont.											
PLANULATUS. M'Coy, Ann. N. H., 1848, p. 415.								M 5			C. O. Malton, Yorkshire, common (M'Coy). Probably a variety of E. scutatus. See Wright, Ool.
scutatus, Lam. & Goldf., v. Echinobrissus.											Echin., p. 335.
SINUATUS, Leske.								M			Malton. Possibly an Inf. Ocl. species from Whitwell.
Pseudodiadema: hemisphericum, Ag., Prod. Mem. Soc. des Sci. Nat. Neuch., 1836, p. 22; Desor, Syn. Echin., t. 13, f. 4; Wright, Ool. Echin., p. 127, pl. villi, f. 1; Cidarites pseudodiadema, Lam., Anim. s. Vert., t. iii., p. 59; Diadema pseudodiadema, Ag., Echin. Snisse, pt. 2, t. 17, f. 49-53; Salter, Geol. Survey, Dec. v., pl. 2; Cidaris diadema, Y. & B., pl. vi., f. 3; C. monitipora, Phil., G. Y., 1829, p. 127.						H Jm 5		Wr. P 5			P. mamillanum, Geol. Survey Mem. Expl. of 96 S.E. p. 22 in error.
versipora, Phil., MS., Wright, Ool. Behin., p. 124, pl. vii., f. 4; pl. xii., f. 9; Diadema subangulare, Ag., Echin. Suisse, p. 19, pl. xvii., f. 21-25; Diadema versipora, Woodward, Geol. Survey, Dec. v., Notes to pl. ii.				H	H	H ₅		Wr Jm			
Pygaster: Edwardsii, Buvig., v. P. umbrella.											
umbrella, Ag., Ann. des Sci. Nat., ser. 3, p. 144, t. vii.; Wright, Geol. Survey, Dec. v., Note to pl. 8; Cottean, Etud. Echin., p. 194, pls. 27, 28, f. 1; Phil., G. Y., pl. iii., f. 17; Wright, Ool. Echin., p. 282, pl. xx., f. 2; Pygaster Edwardsii, Buvig., Geol. de la Meuse, p. 46, pl. 32, f. 31-33.					H	H		Wr P 5 Jm			
Pygurus: enarginatus, Desor, v. Clypeus subulatus.											
Hausmanni, Koch & Dunker, (Clypeaster) Verst., Ool., p. 38, t. iv., f. 3; Wright, Ool. Echiu., pp. 405, 467, pls. xl., xxxix., f. 2.					H Jm			Wr P 5			C. O. Settrington.
pentagonalis, Phil., (Clypeaster) G. Y., pl. iv., f. 24; Wright, Ool. Echin., p. 895, pl. xxxvi., f. 1a, b, c, d, f, 2a, b; Echinanthites orbicularis, Y. & B., pl. vi., f. 5.				Wr P 1 H Jm	5	Wr 5 H 5		P 5 Wr			Type in York Museum; Wright (pl. xxxvi., f. 1h, f. 2) in Scarborough Museum.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(ECHINOIDEA)—cont. Pygurus—cont. Phillipsii, Wright, Ool. Echin., p. 403, pl. xxxix., f. 1. Spatangites: bicordatus, l.eske, v. Collyrites. ovalis, Park, v. Collyrites bicordata. Spatangus: ovalis, Phil., v. Collyrites bicordata.					H			Wr. P			C. O. Malton. Very rare.
Stomechinus: gyratus, Ag., (Echinus) Echin. Nuisse, 2 t. 23, f. 43-46; Wright, Ool. Echin., p. 215, pl. xiv., f. 4: E. petallatus, M'Coy, Ann. N. H., 1848, p. 409. (ASTEROIDEA.) Asterias: arenicola, Charlesworth, v. Astro-						H 3 5					
pecten clavæformis. Astrogonium (plates of). Astropecten: arenicolus, Forbes, v. A. clavæformis.				H ₂							
clavæformis, Wright, Ool. Echino., 1863, p. 125, pl. x. a, f. 3 (non 2); pl. xi., Asterias arenicola, Charlesworth, Lond. Geol. Johrn., t. 17; Astropecten arenicolus, Forbes, Mem. Geol. Survey, vol. ii., pt. 2, p. 477. orion, Forbes, Mem. Geol.		Wr. Jm P									Kellaways Rock, Levisham. Has erroneously been referred to the Lias, and Calc, Grit. Type in York Museum. Wright (pl. x., f. 1) in York
orion, Forbes, Mem. Geol. Survey, vol. ii., pt. 2, p. 478; Wright, Ool. Echin., 1863, p. 127, pl. x. A, f. 1 a. rectus, M'Coy, Ann. Nat. Hist., 1848, p. 408; Wright, Ool. Echin., 1863, p. 129, pl. xii.		P P	•	Wr. Jm							Museum. Occurs in nodules in the Calc. Grit, North Cliff, Filey. Wright (pl. xii.) in York Museum.
(CRINOIDEA). Apiocrinus: polycyphus, Desor, (Millericrinus) Bull. Soc. Sci. Nat. Neuch., 1845, vol. i., p. 218; Merian, Basel Naturf. Gesell.,				H P		H 5					York Museum.
Merian, Basel Naturf. Gesell., 1849, vol. viii., p. 29.						H					•

. Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Corsl Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	REMARKS.
(CRINOIDEA).—cont. Millericrinus: echinatus, Schlot., (Encrinites) Petref. I., 331, III., 95, b. 25, f. 5; d'Orb., Crin., t. 16, f. 10; Phil., G. Y., pl. iii., f. 9; (Rhodo- crinites) Goldf., Petref., t. 60, f. 7.				H 1 3 5 P 1 5 S 5		$\mathbf{H}_{_{2}}$		P 1 5			Phil. (pl. iii., f. 9) in York Museum. Phil. (pl. iii., f. 11) which is in Scarborough Museum is another species. Rare. May he the same as thepreceding.
Pentacrinus:						5					
spp.				H		H			Jmi J?		The Kim. Clay specimens may be from the Lias. See vol. i.
ANNELIDA. Sabellaria : segmentata, MS.				Ym							pp. 374, 875. "Calc. Grit." York Museum.
Serpula: deplexa, Phil., v. Tab. I. intestinalis, Phil., v. Tab. II. lacerata, Phil., v. Tab. II. squamosa, Phil., v. Tab. II. tetragona, Sow., v. Tab. II. tricarinata, Sow., M. C., t. 608, f. 3, 4.	L.L. G.L. G.L. Bl.		P	S 1 H 1 H 1 H 1		H ₁	S 2		н		Type in Scarborough Museum Type in Scarborough Muscum
vertebralis, Sow., M.C., t. 599, f. 5.				ŀ						La	
sp.								Н	1		Smooth species in coils. You Museum.
Vermicularia : compressa, Y. & B., v. Tab. II.	В1.	Le	P	H							Vermetus concinnus, Sow.
CRUSTACEA. Callianassa: sp.						Mr 5	ď				Fide Carter.
Glyphæa: LEPTOMANA, Phil., MS., G. Y., p. 241.			P		-						
rostrata, Phil., (Astacus) G. Y., pl. iv., f. 20; Woodward, Geol. Mag., 1868, p. 354, pl. xvii., f. 2.	B1.	Le	P	H 1 5	,			P 1 5			
scabrosa, Phil., G. Y., p. 241.		P	F	5	[P 1 5	ı		Nearly allied to G. rostrat York and Malton Museums

. Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Glyphæa—cont. Udressieri, Meyer, Neue Gatt. foss. Krebse, p. 14, t. 4, f. 48; Etal., Bull. Soc. Geol. Fr. t. xvi., 1858, p. 190, t. 4, f. 4, 5; Oppel., Pal. Mitth., p. 66, pl. xvi., f. 7.				Ym Bm Mm Sm							Specimens in Brit. Mus. labelled Astacus scabrosus, and Gl. squamosa.
Goniochirus: cristatus, Carter, Q. J. G. S., vol. xlii., p. 555, pl. xvi., f. 9.		Υm									York Museum.
Mecochirus: PEARCEI, M'Coy, Ann. & Mag. N.H., 1849, ser. 2, vol. iv., p. 172; Carter, Q. J. G. S., xlii., p. 557, pl. xvi., f. 13.			M								? Yorkshire.
Socialis, Meyer, (Carcinium) Neues Jahrb. 1841, p. 96; (Eumorphia) Palæont., Bd. 1, t. xix., f. 2-19; Oppel, Pal. Mitth., t. xxii., f. 2, 3; Carter, Q. J. G. S., xlii., p. 553.			Ym								
Orhomalus: platycheles, M'Coy, (Pagurus?) Ann. Nat. Hist., 1849, p. 171.			,					Υm			York Musuem.
Pollicipes: concinnus, Morris, Ann. N. H., 1845, p. 30, t. 6, f. 2; Sow., M. C., t. 647, f. 1; Phil., G. Y., pl. v., f. 18; Darwin, Foss., Lep., p. 50, t. 3, f. 1.	-		P								Phil. (pl. v., f. 18) in York Museum is possibly an Aptychus (Platnauer).
Hausmanni, K. & D., Verst. Ool., p. 52, t. 6, f. 6.									La		
Diastopora: diluviana, M. Edw., Ann. Sc. Nat., 1838, p. 228, t. 15, f. 3; (Berenicea) Lamx, Exp. Meth., t. 80, f. 3, 4; Vine, Brit. Assoc. Rep., 1882-8, p. 256.	Ob?		,	H							
Terebellaria :											
antilope, Lama., v. T. ramosissima.											
Famosissima, Lamx., Exp. Meth., p. 84, t. 82, f. 1; Blaiuv., Man. d'Act., p. 409, t. 67, f. 5; Vine, Brit. Assoc. Rep., 1882-8, p. 254; T. antilope, Lamx., Exp. Meth., t. 82, f. 2; Morris, Cat., p. 129.								P			

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
BRACHIOPODA. Acanthothyris: senticosa, var. fileyensis, Buckman and Walker, Proc. York. Phil. Soc., 1889, p. 56; Rhynchonella spinulosa, var. fileyensis, B. & W., ibid., p. 37.				Wk							
Discina:		•						1			
CENTRALIS, Bean, MS.		Le 1							1		Bean Coll.
elevata, Blake, Q. J. G. S., xxxi., p. 231; Dav., Suppl., p. 81, pl. xi., f. 31.							H				
humphriesiana, Sow., (Orbicula) M.C., t. 506, f. 2; Dav., Ool. Mon., p. 10, pl. 1, f. 3; Suppl., p. 81, pl. xiii., f. 17-19; Desl., Etud. Crit. sur des Brach., &c., 1862, p. 36, pl. vi., f. 12-14.									Mm Wk		Malton and Specton.
latissima, Sow., (Patella) M. C., t. 139, f. 1-5; Dav., Suppl., p. 80, pl. x., f. 16-19; pl. xi., f. 30.									J B P S La		
radiata, Phil., v. Anomia.					1			1		Ì	
Lingula:		L						1	İ		
Lævis, Bean, MS.		Le	ŀ					L			Bean Coll.
ovalis, Sow., M. C., t. 19, f. 4; Dav., p. 98, pl. xviii., f. 14; Suppl., p. 74, pl. ix., f. 1-9; pl. x., f. 16 b; pl. xi., f. 29.									J B P La	La	
Rhynchonella: concinna, Sow., v. Rh. Thurmanni,		l									
inconstans, Sow., (Terebratula) M. C., t. 277, f. 3, 4; Von Buch, Mem. Soc., Géol. Fr. iii, p. 146, pl. xiv., f. 16; d'Orb., Prod. I., p. 375; Dav., p. 87, pl. xviii., f. 1-4; Suppl., p. 191, pl. xvii, f. 1-6; Phil., G. Y., pl. ii., f. 24; T. difformis, Ziet., Verst. Wirt., t. xlii., f. 2.					,				J B P	La	Kim, Knapton (Phil, 1st Ed.).
lacunosa, Sohloth., (Terebratula Leonards Min. Tasch., vir., pl. 1, f. 2; Von Buch, Mem. Soc. Géol. Fr. iii., p. 150, pl. xv., f. 22, Quenst., Jura, p. 632, pl. 39, f. 77-107; Dav., Suppl., p. 196, pl. xxvi., f. 13, 14.				H S Jm	Ħ,						Olivers Mount and Beedale. Dav. (pl. xxvi., £ 13) in Jm.
spinulosa, var. fileyensis, B. & W., v. Acanthothyris.								3			
subvariabilis?, Dav., p. 80, pl. xv., f. 7; pl. xvii., f. 11; Suppl., p. 203; De Loriol, Mon. Pal. et Geol. des Étages sup. Jur. Boulogne-sur-Mer, p. 239, pl. xxv., f. 2.	l ₂ .								Wk Mm		See Proc. York, Phil. Soc. for 1888.

, Sprcies.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
thynchonella—cont.		Le									«Tt
varians, Schloth., (Terebratula) Petref., p. 267; Dav., p. 83, pl. klii., f. 14, 17; Suppl., p. 212, pl. xxviii., f. 3 a, b, 4, 12, 13.		1									"It is probable that the shel which occurs in the Kello way Rock of Scarborough may represent the type o Schlotheim's species," David son, Suppl., p. 213.
varians, var. socialis, Phil., G. Y., pl. vi., f. 8; Dav., Suppl., p. 214, pl. xxviii., f. 8-11.		H P? K	H	P							Sons Supply p. 210.
varians, var. Thurmanni, Voltz, (Terebratula) Thirria, Géol. de la Haute Saone, pp. 172, 179; Etallou, Leth. Brunt, p. 291, pl. xlii., f. 6; Walker, Proc. Vorksh. Phil. Sec., 1877; Dav., Suppl., p. 215, pl. xxviii., f. 14-16.				Wk 1 5 H 1 2 8 5 S 1 5 Jm 1							See Geol. Mag., 1875, p. 572.
sp. erebratula:				-	S				J		T. intermedia, Survey Mem.
bisuffarcinata, Ziet., Verst. Würt., p. 53, pl. xl., f. 3; Quenst., Brach., p. 394, t. xlix., f. 22-40; Dav., Q. J. G. S., xxix., p. 197, pl. viii., f. 5; Suppl., p. 124, pl. xv., f. 1, 2, 3.					ì						Expl. of 95 N.W.
bucculenta, Sow., v. Waldheimia. boloniensis, Sauvage & Rigaux, v. Waldheimia.	·		İ								
difformis, Ziet., v. Rh. inconstans.				_							
fileyensis, Walker, Dav., Suppl., p. 139, pl. xiv., f. 22-24; T. bisuffarcinata, Dav., in part.	:			H 5 Jm 1 Wk							Nearly allied to T. globata.
Gesneri, Etal., v. Waldheimia.				1							
impressa, Von Buch, v. Wald- heimia.											
inconstans, Sow., v. Rhynchonella.											
insignis, Schübler, var. maltonensis, Oppel, Juraf., p. 608; Dav., p. 47, pl. xiii., f. 1; Suppl., p. 126, pl. xv., f. 5, 6.				P	D ₅	D 5 H 2 3 5		P 5 Jm			T. insignis, Schüb. (juv.) c Hudleston's lists, v. W. mar garita. Dav. (pl. xv., f. 5) in Leck. Col

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Terebratula—cont.											
intermedia, v. T. bisuffarcinata.								l			
lacunosa, Schloth., & Von Buch, v. Rhynchonella.											
lævigata, Bean, v. Waldbeimia impressa.											
perovalis, Dav., v. T. bisuffar- cinata											
repeliniana, d'Orb., Prod. II., p. 25.						Wk	!				Helmsley.
Thurmanni, Voltz, v. Rhyncho-		l				Mm					
varians, Schloth., nella.											
Thecidium: triangulare, d'Orb., var. Prod. I., p. 316.				Wk							
sp., Dav., Suppl., p. 111.						Wk					
Waldheimia: boloniensis, Sauvage & Rigaux, (Terebratula) Journ. de Conch., 1871, p. 354, and 1872, p. 87, pl. ix., f. 3; Dav., Suppl., p. 154, pl. xix., f. 1, 2.						Wk 5					Dav. (pl. xix., f. 2) in Leck. Coll.
bucculenta, Sow., (Terebra- tula), M. C., t. 438, f. 2; Dav., p. 55, pl. xiii., f. 8; Suppl., p. 173, pl. xxii., f. 23 and pl. xxiv., f. 23-25.				Wk	:			P			Dav. (pl. xxni., f. 23), in Leck.
Gesneri, Etallon, Leth. Brunt., p. 287, pl. xli., f. 10; Walker, Proc. York. Phil. Soc., 1888, p. 33, pl. 1, f. 17-19.				5		Wk 5 Mn	1				North Grimston and Langton Wold.
? Hudlestoni, Walker, Dav., Suppl., pp. 133, 186, pl. xvii., f. 14-16.				What I have a second se	1						Some forms are now referred by Walker to <i>Terebratulina</i> substriata, Schloth. var. suffieldensis. Geol. Mag. 1892, p. 364.
impressa, Von Buch, (Tere- bratula) Ziet., Würt., p. 53, pl. xxxix., f. 11; Bronn, Leth. Geog., p. 306, pl. xviii., f. 12; Von Buch, Mém. Soc. Géol. Fr., ser. i., t. iii., p. 228, pl. xx., f. 7; Dav., p. 33, pl. iv., f. 9, 10; pl. x., f. 7, 7a, b, c; Suppl., p. 182, pl. xxiv., f. 32; Tere- bratula lewigata, Bean, MS.			Н	1							T.lævigata is in York Museum.
margarita, Oppel, Würt. Nat. Jahreshefte, xvii., p. 35, t. ii., f. 3; Dav., Suppl., pp. 176, 187, pl. xxiv., f. 12, 13.						Wh					T. insignis, Schüb. (juv.) of Hudleston's lists. See Proc. Geol. Assoc., v., p. 492, and Q. J. G. S., xxxiii., p. 328.
		1						1			

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Waldheimia—cont. ornithocephala, Sow., M.C., t. 101, f. 1, 2?; Dav., p. 40, pl. vii., f. 6, 7, 8, 10, 13, 23; Suppl., p. 167, pl. xxii., f. 1, 2; pl. xxiv., f. 27.	Cb.	Jm Wk 6 Le 1 H K 6									
Rudleri, W. & B., Proc. York. Phil. Soc., 1889. umbonella, Lam., Anim., sans Vert., p. 249, t. vi.; Dav., Anm. Mag. Nat. Hist., ser. 2, v., pl. xiii., f. 18; Desh., Ency. Meth., iii., p. 1028, pl. 240, f. 5; Dav., Suppl., p. 168, pl. xxii., f. 7, 8.		Wk Jm		Wk							Geol. Mag. 1875, p. 572. W. ornithocephala of Kel. Rock lists. "This species replaces in the Kelloway Rock the W. Lagenatis of the Cornbrash." Dav., Suppl., p. 169. Walker gives W. umbonella as a var. of W. ornithocephala, Proc. Yorksh. Phil. Soc., 1877.
LAMELLIBRANCHIATA (MONOMYABIA). Anomia:											
? radiata, Phil., (Discina) G. Y., pl. iv., f. 12 (non. Sow.).				H	H 2 5	H		Ps			Type in Ym. Possibly the same as Placunopsis in equa-
sp.	İ					H					Q. J. G. S., xxxiii., p. 328.
Avicula: medilignensis, Blake, Q. J. G. S. xxxi., p. 229, pl. xii., f. 2.						H ?			н		
braamburiensis, Sow., v. Tab. II.	м	Le 1 P 1 S 6 K 8 H 1 Jm 1		H S 1 2 Jm							,
clathrata, Lyc., Suppl. G. O. Moll., p. 36, t. xl., f. 7, 7 a, b.		Le 1	н								
elegantissima, Bean, Phil., G. Y., pl. iv., f. 2.				H ?				P			Malton. Single specimen in York Museum.
expansa, Phil., G. Y., pl. iii., f. 85.		P	P	H 1 6 5 8 5	H	S		P	s		Near to Av. inæquivalvis

Species.	Pass down.	Kellaways Bock,	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	-U.C.G. and Cement Clay.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Monomyaria)—cont.											
Avicula—cont.		ا	_	ш				Jm		Ta	
inæquivalvis, Sow., Tab. I.	L.L.	Le H S K 6	HS	H? S				3111		La	
leevis, Bl. & H., Q. J. G. S., vol. xxxiii., p. 899, pl. xvi., f. 2.				H 2 3							
ovalis, Phil. G. Y., pl. iii., f. 36; Hud., Proc. Geol. Assoc., v., p. 478, pl. v., f. 15 a. h.		Le 1 S		H 1 2 3 5 P 1 S 5	H 1 2 5			P 5 Jm			Hud. (pl. v., f. 15) in Hudleston Coll.
ovalis, var. obliqua, Bl. & H., Q. J. G. S., xxxiii., p. 399, pl. xiv., f. 13.							H 1 2				
pteropernoides, Bl. & H., Q. J. G. S., xxxiii p. 398, pl. xvi., f. 4 and 6.					H						In the shell-hed at the top of the Low. Lst. Thornton.
Strnekmanni, De Loriol, 1875, Mém. Soc. Phys. Genéve, xxiv., p. 164, pl. xx., f. 1, 2; B. & H., Q. J. G. S., xxxiii., p. 399, pl. xvi., f. 3.					H						Single specimen in the shell- hed at the top of the Low. Lst. Thornton.
tonsipluma, Phil.; "Avicula resembling A. communis," Y. & B., t. vii., f. 15.								P			
spp.			н				H				
Exogyra:	~			_		ъ	н	ը	70		T. and M. (nl. wiv. 'f E) in
nana, Sow., (Gryphæa) M. C., t. 883, f. 8; G. mima, Phil., G. Y., pl. iv., f. 6; L. & M., p. 127, t. xiv., f. 5.	Cb.			H 2 5 S 1 2 5 5	H 7 S 1 2	H ₇	3	P 5	B P H		L. and M. (pl. xiv., f. 5) in Bean Coll. Bm.
sinnata , Sow., M. C., t. 336; Phil., G. Y., pl. ii., f. 23.										La	
cf. spiralis , Goldf., Petref., p. 33, t. 86, f. 4.				H							•
SUBSINUATA, Leym., (?=E. conica).									s		Doubtful. See vol. i., p. 376.
virgula, Defr., Goldf., Petref., t. 86, f. 3.									B		
sp.						H					

Species.	Pass down.	Kellaways Rock	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(MONOMYARIA)—cont. Gervillia: acuta, Sow., v. Tab. II. angustata, Röm., Verst. Ool., p. 85, t. xiv., f. 6. aviculoides, Sow., (Perna) M. C., t. 66; Goldf., Petref., t. 115, f. 8.	El Cb.	Ħ Ħ		H 1 2 S 1 2	H ₂ H ₇ S ₁ 2	H	H	P s			In the shell-be d, Pickering.
Gryphæa: bilobata, Sow., M. C., t. 149, f. 2. bullata, Sow., v. G. dilatata.		H Jm 1 K		Jm							G. subloba, Survey Mem, Expl. of 94 S.W.
 chamæformis, Smith, strat. id. f. 5. dilatata, Sow., M. C., t. 149, f. 1; var. Phil., G. Y., pl. vi., f. 1. 	Cb.	Le 1 P 1 Jm H S	HS	P 1 H 1 S Jm S 1 5	S 1 5 H 5	H 5 82.5		P			Hackness. Type form common in lowe beds.
dilatata, var. bullata, Sow M. C., t. 368; Phil., G. Y., pl. iv., f. 36.		Le 1 S 5	ĸ	P	Ħ		H				
mima, Phil., v. Exogyra nana. nana, Sow., v. Exogyra. subgibbosa, Bl. & H., Q. J. G. S., vol. xxxiii., p. 400, pl. xvi., f. 7.				5			H				
Hinnites : abjectus, Phil., v. Tab. II.	D	Le						L Jm?			"C. O. Malton," (L. & M. p. 125.)
tumidus, Ziet. v. Tab. I.	ML			н	H	H 1 3					

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Monomyaria)—cont. Hinnites—cont. velatus, Goldf., v. H. tumidus. sp. (corallina, Hud., Proc. Geol.						H					V _e
Assoc., v., p. 491.) Lima: argillacea, Phil., G. Y., pl. v., f. 10. densepunetata, Röm., Verst. Ool., p. 79, t. xiv., f. 3. duplicata, Sow., v. Tab. II.	M	Le P	PHP			H		s			Allied to L. punctata.
elliptica, Whiteaves, Ann. Mag. Nat. Hist., 1861, p. 146, t. ix. b, f. 3, 4. fragilis, Röm., Verst. Ool., p. 77, t. xiii., f. 12. gibbosa?, Sow., M. C., t. 152 (non Goldf.); Bronn, Leth. Geog., 213, t. 19, f. 11; L. & M., p. 28, t. 8,	•	1		H ₃	H 1 2 3 5	H?		P			The form in the C. R. of N. Grimston is a variety.
f. 7. grandis, Röm., Verst. Ool., p. 76, t. xiii f. 10; Hud., Proc. Geol. Assoc., v. p. 479, pl. vi., f. 19. læviuscula, Sow.,* (Plagiostoma), M. C., t. 382; Goldf. Petref., t. 102, f. 3. læviuscula, var.* læviuscula, var.* Hud., Proc. Geol. Assoc., v., p. 478, pl. vi., f. 18. notata, Goldf., Petref., ii., p. 83,		Le		H ₁	H ₅	H 1		P 5 Jm			Hud. (pl. vi., f. 19) in Hudleston Coll. Sowerby's type. A smoother form. Very coarsely ribbed. Near to L. tumida, Röm. Type in York Museum.
t. 102, f. 1. pectiniformis, Schloth., v. Tab. II. Phillipsii, d'Orb., Murch., Russia, ii., p. 478, t. 42, f. 8. rigida, Sow., (Plagiostoma) M. C., t. 114, f. 1; Goldf., Petref.	D	Le 1 H?		S	H 5	H 7 Jm		P 1			,
p. 83, t. 101, f. 7.	,				5	5 5 5 Jm					

^{*} Entered in accordance with Hudleston, Proc. Geol. Assoc., v., pp. 478, 490; and Blake and Hudleston, Q. J. G. S., xxxiii., p. 399.

Species,	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calo, Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Let.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Monomyaria)—cont.											
Lima—cont								ł	1		
rudis, Sow., M. C., t. 214.	Cb			H		H 5 Jm 1 5	ı	P			
RUSTICA, Sow., M. C., t. 381.		1						М	l		Malton.
subantiquata, Röm., Verst., Ool., p. 78, t. xiii., f. 15; Hud., Proc. Geol. Assoc., v. 478, pl. v., f. 17.					H ?	H 5 Jm 5					Hud. (pl. v., f. 17) in Hudleston Coll.
spp.		Ħ		Ħ			١.				
Ostrea :	İ	Ĺ					1	1			
archetypa, Phil., G. Y., pl. vi., f. 9.		Le P									
bullata, v. Gryphæa.		l									
CANALICULATA, Bean, MS. (non Sow., non d'Orb.)		Ļе									
deltoidea, Sow., M.C., t. 148.									H P		Mm.
duriuscula, Phil., G. Y., pl. iv., f. 1.						H 1 5		P 1 5	1		Very common.
flabelloides, Lam., v. Tab. II.	D	Le P H Jm		H 8					S?		
gibbosa, Lesueur, Dollf., Kim. du Cap de la Hève, pl. 17, f. 5.									La		
gregaria, Sow., M.C., t. 111, f. 1, 3; Goldft, Petref., t. 74, f. 2; Bronn., Leth. Geog., p. 188, t. 18, f. 16; L. & M., p. 4, t. 1, l. 2, 2a; O. palmetta, Sow., M. C., t. 111, f. 2.	D		S	H P S S	S 2	H 7 8 1 5 Jm 1		P			
inæqualis, Phil., v. Placunopsis.											
moreana, Buvig., Géol. de la Meuse, p. 26, pl. xvi., f. 41-48.						H					
palmetta, Sow., v. O. gregaria.			:								
PROCERULA, Bean, MS.		Le									
solitaria, Sow., v. Tab. II.	D	1		H S 2	H 2 5 8 2	Ħ		P			

Species.	Pass down.	Kellaways Rock.	Oxford Clay:	Low, Cale, Gr. and Low, Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Monomyaria)—cont. Ostroa—cont. striata, Bear, MS.		Le l									
undosa, Bean, Phil., G. Y., pl. vi., f. 4.		Le P 1 Jm									Type in York Museum.
Pecten: arcuatus, Sow., v. Tab. II.	D	Le									
articulatus, Schloth., v. Tab. II.	D		H?	H P	H 5 S	H S 1 Jm	Ħ,	P S			P. vimineus, Sow.
cancellatus, Bean, v. P. intertextus.											
cinctus, Sow., M. C., t. 371.										La?	Form near to P. annulatus, Sow. Specton Clay. Lam- plugh, Q. J. G. S., vol. xlv., p. 592.
comatus, Münst., Goldf., Petref., t. 91, f. 1.			*			Jm					Lycett Coll. In Jermyn Street Museum.
demissus, Phil., v. Tab. II.	D	Le H P S K	н		H		H	P 5 Jm			P. elimatus, Bean in Brit. Mus. (Hud.).
fibresus, Sow., M. C., t. 136, f. 2; Goldf., Petref., t. 90, f. 6; ? Phil., G. Y., pl. vi., f. 3.		Le 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		H 7 8 5	H 7 S 2	H?	S	P S Jn	1		Includes P. subfibrosus, d'Orb. and P. vagans Sow., in part in Hudleston's Table, Proc. Geol. Assoc., v., p. 491.
hemicostatus, I. & M., v. P. vagans.											
inæquicostatus, Phil., G. Y., pl. iv., f. 10; Lyc., Suppl., p. 32, t. xxxiii., f. 1, 1a; Hud., Proc. Geol. Assoc., v., p. 478, pl. v., f. 16; P. octocostatus, Röm., Verst., Ool., p. 69, pl. 3, f. 18.		. P	н	2	H	H		P Jn	1		Hud. (pl. v., f. 16) in York Museum. Lyc. (pl. xxxiii., f. 1) in Leck. Coll.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(MONOMYARIA)—cont.	1		1		Ī			1			
Pecten—cont. intertextus, Röm., Verst. Ool., Nachtr., p. 27, t. xviii., f. 23; P. cancellatus, Bean, Phil., G. Y. 1835, p. 101; P. michaelensis, Buvig., Géol. de la Meuse, p. 24, pl. xxii., f. 4; Lyc., Suppl. G. O. Moll., p. 34, t. xxxiii., f. 3.					H 2 5	H		Jm 5			Lyc. (pl. xxxiii., f. 3) in Leck. Coll.
lens, Sow., v. Tab. II.	D	H S K		H Jm 5	H 2 5	H ₁ 5	S	P			
lens, var. Morini, De Lor., in Pellat, Bull. Soc. Géol. Fr., ser. 2, vol. xxiii., p. 207; De Lor. & Pellat, Géol. Pal. Boulogne-sur- Mer., p. 107.										La	
midas, d'Orb., Prod. II., p. 54.							H 2 3				
octocostatus, Röm., v. P. inæqui- costatus.		ĺ					•				
peregrinus, L. & M., v. P. vagans.											
qualicosta , Etallon, 1862, Leth., Brunt., p. 260, pl. 36, f. 13; De Lor., 1875, Mém. Soc. Phys. Geneve, xxiv., p. 202, pl. xxiv., f. 18–20.					H 2 5						
subfibrosus, d'Orb., Prod. I., p. 373.	Cb.			H 2 P 1 S 1 2	H S 1			P 5 5			
subtextorius, Münst., Goldf., Petref., ii., p. 48, pl. 90, f. ii.							,	$ m J_{rac{5}{5}}$	S		Kirkby Moorside.
sulcatus, Y. & B., v. P. vagans.						-					
Vagans, Sow., M. C., t. 543, f. 4, 5; Goldf., Petref., t. 89, f. 8; P. sulcatus, Y. & B., 1822, pl, 9, f. 3; P. peregrinus and P. hemicostatus, L. & M., pp. 8, 9, 10, t. 1, f. 12, 12a, 14, 16.	Cb.	Le 1	н	S 1 2 5	S 1 2 5	S 5	S 2	P 5			Probably a variety of P. fibrosus.
varius, Y. & B., v. P. articulatus.											
velatus, Goldf., v. Hinnites tumidus.											
vimineus, Sow., v. P. articulatus.											
Perna: aviculoides, Sow., v. Gervillia.											

Species.	Pass down.	Kellaways Rock,	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(MONOMYARIA)—cont. Perna—cont.											
mytiloides, Lam., Anim. sans Vert., vi., p. 142; Ziet., Petref., p. 71, pl. 54, f. 2; Goldf., Petref., p. p. 104, t. 107, f. 12; Quenst., Jura, t. 52, f. 8; Damon, Geol. Wey- mouth, pl. 2, f. 5; Lyc., Suppl. G. O. Moll., p. 112, t. 32, f. 8.	G.L.	Jm			H 2 3 5	H 1 2 3	H	Jn	3		
rugosa, Goldf., var. quadrata, Phil., v. Tab. II.	G.L	Le K		H 1 2	H	H					<u> </u>
subplana, Etallon, Leth., Brunt., p. 231, pl. 31, f. 4; De Lor., 1872, Mon. du jur. sup. de la Haute Marne, p. 368, pl. 21, f. 1, 2, 3; Mém. Soc. Phys. Genéve, xxiv., p. 169. Sp. n. (inoceramoides, Hud.,	1	6		3	H	H					York Museum.
Proc. Geol. Assoc., v., p. 489). Pinna:					,						
granulata, Sow., M. C., t. 347.									į	J B	
lanceolata, Sow., M. C., t. 281; Phil., G. Y., pl. iv., f. 33.	М		W	Jr	n						
mitis, Phil., G. Y., pl. v., f. 7 Ziet., Petref., t. 55, f. 4.		L ₆ 1 P 6 H 1 K	P								Type in York Museum.
spp.		J _n	ո				Į	1			
Placunopsis: inæqualis, Bean, (Ostrea Phil., G. Y., pl. v., f. 13. Plagiostoma, v. Lima.) G.	ն. <u>ն</u> . 1 19 1	[>		W	r.				Type in Bm. ? Anomia inæquivalvis, Phil. of Leck. list
Plicatula:											
fistulosa, L. & M., p. 15, pl. ii f. 5.	••					$_{f J}$	M s m				
sp. n. (subinflata, Hud., Proc Geol. Assoc., v., p. 491).	3.						HI I				
sp. or (Spondylus), Hud Ibid.	••				1	1 1	H.				

			,		1	1				ŀ	1
SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coraline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(Monomyaria)—cont.	ĺ										
Pteroperna :			1					ı	İ		
pygmæa?, K. & D., (Avicula) Verst. Ool., p. 37, t. iii., f. 6.				Jm							ank Coll. Jm.
Spondylus, v. Hinnites.		ı									
Trichites: Plottii, Llhwyd, Ichn. Brit., p. 90.				S 1 H	H	H					
LAMELLIBRANCHIATA (DIMYARIA).											
Anatina :		l	ĺ								
parvula, Bean, v. Tab. II.	Cb.		Ym								
siliqua, Ag., v. Tab. II.	Cb.	Le H K	P	H	H Jm 2						A. undulata (Sow.) of Leck. Coll. See Lyc. Suppl. G. O. Moll., p. 84
undulata, Phil., v. A. siliqua.											
versicostata, Buvig., Géol. de la Meuse, p. 10, pl. ix., f. 11-13; Leek., Q. J. G. S., vol. xv., pl. iii., f. 6.		Le H P									Leck. (pl. iii., f. 6) in Leck. Coll.
sp.					H						
Arca:					5						
æmula, Phil., G. Y., pl. iii., f. 29; L. & M., p. 47. t. v., f. 17; ? A. mosensis, Buvig., Géol. de la Meuse, p. 20, pl. xvi., f. 7, 8.		Le 1		H		H Jm	:	P 5 S			
astreicola, Buvig., Géol. de la Meuse, p. 19, pl. xvi., f. 12-14.				$\mathbf{J_{i}^{m}}$							
Langii ?, Thurm, Contejean, Kim., p. 293, pl. 16, f. 9-12; A. lata, K. & D., Ool. Geb., p. 49, pl. ?, f. 10 (non Gmel. nec Münst.); A. sublata, d'Orb., Prod. II., p. 18; Thurm. & Et., Letb. Brun., p. 210, pl. xxvi., f. 8; A. errata, Desh., Conch., II., p. 350.						Ŧ					This is a doubtful determination. If it occurs in Yorkshire d'Orbigny's name should take precedence. See Thurm. & Et., Leth. Brun., p. 210.
lanthanon, Bl. & H., Q. J. G. S., xxxiii., p. 398, pl. xv., f. 6.						H					Single specimen.
mosensis, Buvig., v. A. æmula.				,				Į			
pectinata, Phil,, v. Cucullma,								ı	-		
quadrisulcata, Sow M. C., t. 473, f. J.				į		H 7 Jm		P			
spp.		K				5				Ј	

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds	Remarks.
(DIMYARIA)—cont.											
Astarte:											
aliena, Phil., v. Lucina. aytonensis, Bean, Lyc., Suppl. G. O. Moll., p. 78, t. xl., f. 13; Bl. & H., Q. J. G. S., vol. xxxiii., pl. xiv., f. 11.						H?		P			Bl. & H. (pl. xiv f. 11) in Leck. Coll.
carinata, Phil., G. Y., pl. v., f. 3; Morris, Q. J. G. S., vi., p. 317, pl. 30, f. 2.		P	н								
depressa , Münst., Goldf., Petref. p. 192, t. 134, f. 14; L. & M., p. 85, t. ix., f. 11.					H ₂						
duboisiana , d'Orb., Murch., Russia, ii., p. 455, pl. 38, f. 14-17.				H	H 1 2 S 2			Jm			
duboisiana, var. æqui- latera, Hnd., Proc. Geol. Assoc., v., p. 486.					H						York Museum.
extensa, Phil., v. Tab. II.	Cb.			H				P s			? A. pererassa, Et.
lineata, Sow., M. C., t. 179, f. 1.					1				Si		
lurida, Phil., v. A. ungulata.											
minima, Phil., v. Tab. II.	D	Le Jm									
ovata, Smith; Phil., G. Y., pl. iii., f. 25; Sow., M. C., t. 645, f. 1-3.		1		\$ 5	H 2 3 5 S	H 5 S 1 2 Jm 5	S ?	P			
ovata, var. ? michaudiana, d'Orb., Prod. II., p. 50; Dollf., Kim du Cap de la Hève, 1863, p. 61, pl. ii., f. 21.						H ?					Specimen in York Museum. ? Coral Rag. Hnd., Proc. Geol. Assoc., v., p. 486.
politula, Bean, v. Tab. II.	Cb.	Le							İ		
rhomboidalis, Phil., (Iso-cardia) G. Y., pl. iii., f. 28; L. & M., p. 84, t. ix., f. 20; Hippopodium luctense, d'Orb., Prod. I., p. 308: H. bajociense, d'Orb., Ibid., p. 277.		Bm		H		H 3 5 Jm 5		P			
robusta, Lyc., v. Tab. II.	Cb.	J_{i}^{m}							1		
SENECTA, Bean, MS.										La	Near to A. laticosta, Desh. The name is sometimes mis- printed A. sinuala.

SPECIES.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	REMARKS.
(DIMYARIA)—cont.											
Astarte-cont. ungulata, Lyc., v. Tab. II.	Cb.	P 1	P								A. lurida, Phil. (non Sow.).
sp. n. ("megalomorpha," Hud. Proc. Geol. Assoc., v., p. 486).		K?		H							Immense specimens at Wydale (Hud.).
spp.		K			H						
CARDINIA: HUMATA, Brown, v. Tab. II.			M P								
Cardita: deltoidea, Sow., v. Pholadomya. similis, Phil., v. Opis Phillipsii.											
Cardium:											
citrinoideum, Phil., v. Tab. II. cognatum, Phil., v. Tab. II.	Cb.	Le P H Jm K									It is probable that many of these species will eventually be placed under <i>Protocar-dium</i> .
Crawfordii, Leck., Q. J. G. S.,		Le									Type in Leck. Coll.
xv p. 14, pl. iii., f. 9 a, b.	!	1 P 1 H 1 K									
cyreniforme, Buvig., Géol. de la Meuse, p. 15, pl. xiû., f. 23-27.					H			Jm			"Shell-bed," Pickering
delibatum ?, De Loriol, Mém. Soc. Linn. Norm., 1372, xvi., p. 244, pl. xiv., f. 11, 12.							H				,
dissimile, Phil., fallax, Phil.,											
isocardioides, Bl. & H., Protocardium), Q. J. G. S., xxxiii., p. 397, pl. xiv., f. 12; ? Cardium lobatum, Phil., G. Y., pl. iv., f. 3.						H 5					Cypricardia isocardina, Buvig., pl. x., f. 40, in Hud., Proc. Geol. Assoc., v., p. 487. See also Q. J. G. S., xxxiii., p. 379.
lobatum, Phil., v. Tab. II.								P			Probably the Protocardium isocardioides, Bl. & H.

Species.	Pass down.	Kellaways Rock,	Oxford Clay.	Lew. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay,	Portlandian Beds.	Remarks.
(DIMYARIA)—cont. Cardium—cont. striatulum, Sow., v. Tab. II. subdissimile, d'Orb., Prod. I., p. 338; C. fallax, Phil., G. Y., pl. v. f. 27; C. dissimile, Phil., 1829. sp.	В1.	Jm Le Ym	P				H		B La	A CANADA	Phil. (pl. v., f. 27) in York Museum.
Ceromya: excentrica?, Ag., Étud, Crit. Myes, p. 28, t. 8a, 8b, 8c. Corbicella:					н			P	J B		,
Buvignieri, Desh., (Corbis) Traité Elem., p. 801; Buvig. Géol. de la Meuse, p. 12, pl. xi., f. 1-4. decussata, Buvig., (Corbis) Géol. de la Meuse, p. 13, pl. xii., f. 7-11.		Le			H 5			P			C. Incida. Bean. MS. Brit.
lævis, Sow. (<i>Corbis</i>) M.C., t. 580; Phil., G. Y., pl. v., f. 32. ovalis, Phil., v. Tab. II.	Cb.	1 P 6	н		J ₅			Jm			C. lucida, Bean, MS. Brit- Mis. Fide Hud., Proc. Geol Assoc. v., p. 480. See also C. subæquilatera, Tab. II.
uniformis, Bean, MS.		Jm K?			H			P			
sp. (with mesial umhones). **Corbis*, v. Corbicella.					H	Yn	1				Coral Rag, York Museum (Hud.).
Corbula: curtansata, Phil., v. Tancredia. Corimya: Studeri, Ag., v. Thracia.											
Cucullæa: clathrata, Leck., Q. J. G. S., xv., p. 13, pl. iii., f. 4; Lyc., Supple. G. O. Moll., p. 44, t. xxxix., f. 4, 4a; C. elongata, Leck., Q. J. G. S., xv., p. 8.	Cb.	Le 1 H									Type in Leck, Coll. MS, note of Dr. Lycett with regard to C. elongata in the Kellaways Rock list of Mr. Leckenby:— "Placed in this list on the anthority of Mr. Bean. On examining his solitary example I find it to be a poor
concinna, Phil., v. Tah. II.	Cb.	P	P					P			authority of Mr. Bean. On examining his solitary ex- ample I find it to be a poor distorted specimen of my clathrata."

Species,	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid, Calc, Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont. Cucullæa—cont. contracta, Phil., G. Y., pl. iii., f. 30. corallina, Damon, Geol. Weymouth, pl. iv., f. 8; Lyc., Suppl. G. O. Moll., p. 43. t. xxxix., f. 3; Hud., Proc. Geol. Assoc., v., p. 477, pl. v., f. 12; C. oblonga. Phil., G. Y., pl. iii., f. 34 (non Sow.).	Ċъ.	H ? K			H 2 5 Jm			P 5			Hud. (pl. v., f. 12) in Hudleston Coll. Lyc. (pl. xxxix., f. 3) in Leck. Coll.
elongata, Phil., G. Y., pl. iii., f. 33 (non pl. xi., f. 43; non Sow.); Hud., Proc. Geol. Assoc., v., p. 477.					H ₅	H 1 5		P			Near to C. oblonga, Sow.
elongata, Leck., v. C. clathrata. minima, Leck., Q. J. G. S., xv., p. 13, pl. iii., f. 5. oblonga, Phil., v. C. corallina.		Le 1 P 1									Type in Leck. Coll.
<pre>pectinata, Phil., G. Y., pl. iii., f. 32. spp.</pre>		K 6	H?	P 5		H 7 Jm		Ps	s		Arca of Hudleston's lists. Type in York Museum.
 Cypricardia: glabra, Bl. & H., Q. J. G. S., xxxiii., p. 397, pl. xv., f. 2, 2a. isocardina, Buvig., v. Cardium isocardioides. sp. n. (corallina, Hud., Proc. Geol. Assoc., v., p. 487). ? sp. Cyprina: corallina, d'Orb., Prod. II., p. 16; Cytherea maltonensis, Bean, MS. depressiuscula, L. & M., p. 90, t. xui., f. 4; Phil., G. Y., pl. v., f. 30. 		P 6		H	H ₂		The state of the s	P			"Very like the shell so named in the Leck, Coll." Hud., loc. cit., p. 480. Casts in L. C. G., Hackness (Hud.). = Cytheræa maltonensis, Bean. Fide Hudleston, loc. cit., p. 480.
Cytherea: mattonensis, Bean, v. Cyprina corallina. Gastrochæna: CANALICULATA, Bean, MS. moreana, Buvig., Géol. de la Meuse, p. 5, pl. vi., f. 13-18.		K.	1110	J _m	H Jm			P			Jermyn Street Museum. ? = Pholas recondita, Phil.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.											
Goniomya:											
literata, Sow., v. Tab. II.	м	H		H	H 1 5	H	H 2 5	P			
marginata 7, Ag., Étud. Crit. Myes., p. 16, t. 1, f. 12-14; t. 1c., f. 15.			į				H?				Hudleston doubtfully refer some of the Supracoralline specimens to this species.
v-scripta, Sow., v. Tab. II.	G.L.	Le Jm K		H S 1		H	H 3 S 2	Jm			
Gresslya: peregrina, Phil., v. Tab. II.	Bì.	Le H Jm K		H	H 1 5						
Hemicardia: cingulata, d'Orb., v. Pholadomya.		6									
Hippopodium: bajociense, d'Orb., v. Astarte luciense, d'Orb., rhomboidalis.											
Homomya: crassiuscula, L. & M., v. Tab. II.	G.L.					H					
gracilis, Ag., Étud. Crit. Myes., p. 162, t. 20, f. 1-3.				H							
tremula, Buvig., (Panopæa) Géol. de la Meuse, p. 7, pl. vii., f. 13-15.					H 2 5	H					
sp. n. (grimstonensis, Hud., Proc. Geol. Assoc., v., p. 486.)						H					Single specimen.
Isocardia : clarissima, Bean, MS., Leck., Q. J. G. S., xv., p. 14, pl. iii., f. 10.		Jm Le? P									Type in Leck. Coll.
minima, Sow., v. Tab. II.	Съ.	Le? H		Jm?							
nitida, Phíl., v. Tab. II. rhomboidalis, Phil., v. Astarte.	G.L.	Le 1									I. triangularis, Bean.

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	REMARKS.
(DIMYARIA)—cont. Isocardia—cont. tenera, Sow., v. Tab. II.	Cb.	Le 1		H 1 P 1 S 1 2	THE TAX PARTY OF THE TA						Some of these registrations should possibly be placed under <i>I. minima</i> .
Isodonta: deshayesea, Buvig., v. Sowerbya.				-							
Leda: lachryma, Sow., v. Tab. II. sp.	D	Ļe							P		
Limopsis: corallensis, Buvig., Géol. de la Meuse, p. 20, pl. xvi., f. 26-29.					H				J		
Lithodomus: inclusus, Phil., (Modiola) G. Y., pl. iii., f. 20; Desl., Mém. Soc. Linu. Norm., 1838, pl. ix., f. 39, 40; L. & M., p. 43, t. iv., f. 13, 13a.				Ħ	H	H 1 3 5 Jm		P			
sp.						•				J	
Lucina: aliena, Phil., (Astarte) G. Y., pl. iii., f. 22.					H 2 5			Jm 5			Given as <i>Lucina</i> on the authority of Hudleston.
ampliata , Phil., G. Y., pl. iii., f. 24.					H			P 5 Jm			•
aspera, Buvig., Géol. de la Meuse, p. 12, pl. x., f. 12-14.						$\frac{\mathbf{H}}{3}$	\mathbf{H}_{2}				
Beanii, Lyc., v. Tab. II.	Cb.	H ? Jm		H 1 2	H 1 2 3	5	5	$J_{\frac{n}{2}}$? L. globosa, Buvig.
bellona, d'Orb., v. Tab. II.	м.	$\mathbf{J_{m}^{m}}$		S 5							
crassa, Sow., v. Tab. II.	Cb.										
globosa, Buvig., v. L. Beanii.		Ĺ									
lirata, Phil., G. Y., pl. vi., f. 11.		Le P H		H	H, P						
minuscula, Blake, Q. J. G. S., xxxi., p. 227, pl. xii., f. 8.									La		

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.											
Lucina—cont.					77						
moreana, Buvig., Géol. de la Meuse, p. 12, pl. xii., f. 46-50.		ļ			H 2 3						
obliqua, Buvig., Bull. Soc. Géol. Fr., ser. 2, vol. xüi., p. 843.				H	H ₁ ?						
oculus, Bl. & H., Q. J. G. S., xxxiii., p. 596, pl. xiv., f. 9, 9a.					H 2 3	H					Nearly allied to L. moreana, Buvig.
portlandica, Sow., G. Tr., ser. 2, vol. iv., t. 22, f. 12; Damon, Geol. of Weymouth, pl. vii., f. 7, 8.					5				s	J La P	
substriata, Röm., Verst. Ool., p. 118, t. vii., f. 18.					H	_	H				
spp.		Jm				H		l	ļ		
Lutraria: jurassi, Brong., v. Myacites.											
Lyrodon: clavellata, Goldf., v. Trigonia.											
Modiola: bipartita, Sow., M. C., t. 210, f. 3, 4; Phil., G. Y., pl. iv., f. 30; Röm., Verst. Ool., p. 92, t. xiv., f. 14; Damon, Geol. of Weymouth, pl. 2, f. 12.	Cb.	Le 1 H 1 Jm	н	H 1 3 5 S 1 5 Jm 1	S			P ₅	J P B		Modiola bipartita, Phil., is given as a distinct species by Judd and Blake.
cancellata, Röm., Verst. Ool., p. 92, t. iv., f. 13.				-		H	H 2 3				? Allied to M. pulchra, Phil.
cuneata, Sow., M. C., t. 248, f. 2; Phil., G. Y., pl. v., f. 28; L. & M., p. 131, t. xiv., f. 8; Damou, Geol. of Weymouth, pl. 2, f. 13.	D	Le 1 H 1 P						P			
imbricata, Sow., v. Tab. II.	B1.?	Jm		Jm S							
inclusa, Phil., v. Lithodomus.		1		5				!			
Lonsdalei, L. & M., t. 4, f. 3.		$_{ m Jm}$							1		
Lycetti, Whiteaves, v. Tab. II.	G.L	1			[H		P			
pulchra, Phil., G. Y., pl. v., f. 26.		Ļ				1		1			Type in York Museum.
		P H I Jm		-							

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)-cont.											
Modiola-cont.											
subæquiplicata , Goldf., p. 177, pl. 131, f. 7; ? Röm., Verst. Ool., p. 93, t. v., f. 7.						H		н			
ungulata, Y. & B., v. Tab. II.	D.				H	H		P			Mytilus of Hudleston's list.
sp. n. (gibbosa, Hud., Proc. Geol. Assoc., v., p. 489).					~	H					Single specimen. Leck. Col!.
Mya: depressa, Sow., v. Thracia. gibbosa, Sow., v. Myacites oblatus. sp., Phil., G. Y., pl. v., f. 23. Myacites:		Υm									Type in York Museum.
æquatus, Phil., v. Tab. II.	D.	J_{1}^{m}									·
		1 Н Р 1 Јт Р									
decurtatus, Phil., v. Tab. II.	El.			H	H						•
DECUSSATUS, Bean, MS.	Cb.	1						ĺ			
jurassi, Brong., (<i>Lutraria</i>) An. d. Min., t. 7, f. 4; (<i>Myopsis</i>), Ag., Étud, Crit., t. 30, f. 3-10.		H		H	H						Near to M. decurtatus, Phil.
modicus, Bean, v. Tab. II.	El.	H							l		
oblatus, Sow., (Mya gibbosa) M. C., t. 419, f. 1.				Jm					H		
recurvus, Phil., v. Tab. II.	M.	Le P 1 H 1 Jm	н	H 1 3	H	H ₅		P Jm			Near to M. oblatus, Sow.
securiformis, Phil., v. Tab. II.	G.L	1									
tellina, Ag., v. Pleuromya.		`									
Voltzii, Ag., v. Pleuromya.			1					Ì			
spp.			н		H 1 2 5		H		1		
Myoconcha:					Ì						Book Coll
Sæmanni, Dollf., Kim. du Cap de la Hève, p. 77, pl. xiii., f. 1, 2.					H						Reed Coll.

	0										
Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Cale, Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Clay.	Remarks.
(DIMYARIA)—cont. Myoconcha—cont. texta, Buvig., (Mytilus) Géol. de la Meuse, p. 21, pl. xvii., f. 22, 23. Myopsis: jurassi, Ag., v. Myacites. sp. Mytilus: fjurensis, Merian; Röm., Verst. Ool., p. 89, t. iv., f. 10. pectinatus, Sow., M. C., t. 282. texta, Buvig., v. Myoconcha. Nucula: elliptica, Phil., G. Y., pl. v., f. 6. lachryma, Sow., v. Leda. nuda, Bean, MS., Y. & B., 1828, p. 230; Phil., G. Y., pl. v., f. 5. turgida, Bean, MS.; Nucula sp., Phil., G. Y., pl. v., f. 4. variabilis, Sow., v. Tab. II. sp. Opis: corallina, Damon, Geol. of Weymouth, p. 174, pl. iv., f. 10. excavata, Röm., Verst. Ool., Nachtr., p. 36; O. lunulata, t. xix., f. 5 (non Sow.). lunulata, Röm., v. O. excavata. phillipsiana, d'Orb., v. O. Phillipsi. Phil., G. Y., pl. iii., f. 23; Cardila similis, Phil., 1829; O. Phillipsiana, d'Orb., Prod. L., p. 362. virdunensis, Buvig., Géol. de la Meuse, p. 17, pl. xiv., f. 35–37.	U.L.	Ħ	H P P Ym	Η	H 5 H 5 5	H I Jm I I I I I I I I I I I I I I I I I	Н. 5	H P s	Х .	A A	 ? = M. sublævis. Single specimen, Westendarp Coll. Type in York Museum. York Museum. Type in York Museum. Allied to O. Phillipsi, with which species it is often included. Very rare, Strickland Coll. and Malton Museum. Rare.
gigantea, Buvig., Géol. de la Meuse, p. 7, pl. vii., f. 16, 17. depressa, Sow., v. Thracia. deshayesea, Buvig., Géol. de la Meuse, p. 7, pl. viii., f. 1, 2. tremula, Buvig., v. Homomya.					H 5	H		P			? Pholadomya.

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.											
Pholadomya : acuticosta, Sow., v. Tab. II.	El.	H									
æqualis, Sow., M. C., t. 546, f. 3.		Jm 1				H ?		н			
angustata, Sow., v. Tab. II.	Cb.			P 1 H							
canaliculata, Röm., Verst. Ool., p. 129, t. xv., f. 3.				'l				Υm			
carinata, Goldf., Petref., p. 267, t. 155, f. 6; Ag., Etud. Crit. Myes., p. 84, t. 4 ¹ , f. 4-6.		Le?		H							
cingulata, Ag. Étud. Crit. Myes., p. 133, t. 6 ¹¹ ; <i>Ph. hemi-</i> cardia, Goldf., Petref., t. 156, f. 8 (non Röm.).				P H 1							-
concentrica?, Röm., Verst. Ool., p. 130, t. xvi., f. 2.							H 5				
decemcostata, Röm., Verst. Ool., p. 130, t. xv., f. 6.				P	H						
decussata, Phil., G.Y., pl. ii., f. 9.	P								Pl		Type in York Museum.
DELTOIDEA, Sow. (Cardita) M. C t. 197, f. 4.				P							Sowerby's type came from t Lias.
gracilis, Ag., Etud. Crit. Myes., p. 162, t. 20, f. 1-3.			,	P ?							
Murchisoni?, Sow., M. C., t. 545, f. 1, 2 (non 3).		H K?	Ym								Hudleston does not str whether he refers to f. 3 the M. C.; if so the ent should be under Ph. a toidea, Sow. Ph. Heraulti, K. & M., Ge
obsoleta, Phil., G. Y., pl. v., f. 24.		P	P								Mag., 1883, p. 218.
ovalis, Sow., v. Tab. II.	G.L							P. ?			Includes Ph. ovulum, Ag., Phil.; see Lye., Suppl. G. Moll., p. 121.
ovulum, Ag., v. Ph. ovalis.		ľ				i		ŀ			,
<pre>parcicosta, Ag., Étud. Crit. Myes., p. 97, t. 6, f. 7, 8; t. 6b; t. 6c.</pre>								н Р?			It is doubtful if these really distinct species. Programmer of the paucicostata, Ag. (si Hudleston gives Ph. pau
paucicosta, Röm., Verst. Ool., p. 131, t. xvi., f. 1.				H	H						costa, Röm., in Q. J. G. xxxiii., p. 367, and Pr Geol. Assoc., III., p. 36 ut Ph. parcicosta, Ag. Proc. Geol. Assoc., V., p. 4
similis ?, Ag., Étud. Crit. Myes., p. 106, t. 2, f. 8, 9; t. 2a, f. 1–5;		Yn 1	n j								Sec also Ibid., p. 468.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper. Lst.	Rag.	U.C.G. and Cement Stone.	Coralline Ooolite.	Kimeridge Clay.	Portlandian Beds.	REMARKS.
	Pass o	Kella	Oxfor	Low.	Mid.	Coral Rag.	v.c.c	Coral	Kime	Porti	
(DIMYARIA)—cont. Pholadomya—cont.				1							
simplex, Phil., G. Y., pl. iv., f. 31.	Cb.		н	P					J		
sp. PHOLADIDEA: PULCHRALIS, Bean MS.		Ym 1									
Pholas: recondita, Phil., G. Y., pl. iii., f. 19.						Pl		P			Cook Coll., York Museum.
Pleuromya: tellina, Ag., Étud. Crit. Myes., p. 250, t. 29, f. 1-10.							H				
Voltzli, Ag., Étud. Crit. Myes., p. 249, t. 29, f. 12-14.							H				
Protocardium, v. Cardium											
Psammobia, v. Quenstedtia.											
Quenstedtia: lævigata, Phil., (Psammobia) G. Y., pl. iv., f. 5; L. & M., p. 135, t. xiv., f. 13; Hud., Proc. Geol. Assoc., v., p. 476, pl. iv., f. 9.	D				H			P 5 Jm			Type and Hud. (pl. iy., f. 9) in York Museum.
laevigata, var. elongata, Hud., pl. iv., f. 11.					H						Leck, and Reed Colls.
lævigata, var. gibbosa, Hud., pl. iv., f. 10.								н			York Museum.
Sanguinolaria : parvula, Bean, v. Anatina.		:							-		
Solemya: woodwardiana, Leck., Q. J. G. S., xv., p. 14, pl. iii f. 7.		Le 1 P									Type in Leck. Coll.
sp.	† 	H		H 5	,						Fine specimen in the Bower-bank Coll. Jm.
Sowerbya: deshayesea, Buvig., (<i>Isodonta</i>) Géol. de la Meuse, p. 11. pl. x., f. 30-35.				H							
triangularis, Phil., v. Tab. II.	D			H	H 1 2			P			<u> </u>
Tancredia : brevis, L. & M., p. 92. t. xiii., f. 8.					5			Jm 1			Jermyn Street Museum.
 curtansata, Phil., (Corbula) G. Y., pl. iii., f. 27 (non L. & M.), v. Lyc. Suppl. G. O. Moll., p. 120. 		H P l		1	H 5			P 5			

SPECIES.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite,	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.	-										
Fancredia—cont.	ľ										
planata, L. & M., p. 94, t. xiii., f. 10 a, b.					H 2 5						
Tellina : inccrta. Thurm., v.Thracia Studeri.											There is at present some con-
Fhracia :											fusion between this species and the next. It is probable that Th. depressa is the form
 depressa, Sow., (Mya) M. C., t. 418; (Panopæa) Sow., Géol. Tr., 2nd ser. iv., t. 23, f. 9. 							H ?		J ? S P		in the higher beds, while Th.
Studeri, Ag., (Corimya) Étud. Crit. Myes., p. 269, t. 35; L. & M., p. 110; Tellina inceria, Thurm., Rôm., Verst. Ool., p. 121, t. 8, f. 7; Goldf., Petref., p. 234, t. 147, f. 14.				P 1 H ?			5		Н		? Mya depressa, Phil., pl. ii., f. 8, non Th. Phillipsii, Rom. Ceromya Studeri, Phil., G. Y., p. 256. Phillips gives Th. incerta as a distinct species.
sp.		$J_{\stackrel{\mathbf{m}}{\mathbf{i}}}$									
Trigonia: Blakei, Lyc., p. 205, pl. xli., f. 4; Hud., Proc. Geol. Assoc., v., pl. v., f. 13.				H							Single specimen, Hud. Coll.
clavellata, Sow., M. C., t. 87; Lyrodon clavellatum. Goldf., Petrcf., p. 200, t. 136, f. 6 c, d, e, i, T. clavellata, Morris, Cat.; Damon, Geol. of Weymouth, pl. iv., f. 2; Lyc., p. 18, pl. 1, f. 1, 2.				P H 1			S	P Jm S			"T. Bronii, Ag." of Hudleston's list. This latter species is not British. See Lycett, p. 209.
clavellata, Y. & B., v. T. perlata.		·									1
clavellata, Leck., v. T. rupellensis.											
complanata, Lyc., p. 49, pl. vii., f. 3.		P Ly 1									
corallina , d'Orb., Prod. II., p. 16; Lyc., p. 45, pl. iii., f. 7, 8, 9, 11; pl. viii., f. 5.		Jm		SP	P Jm Ly			P 3 Jm			Rare. Lyc. (pl. iii., f. 7; pl. viii f 5) in Jm.
$costata$, Sow., v. $\left\{egin{array}{l} \mathbf{T.} & \mathbf{denticnlata.} \\ \mathbf{T.} & \mathbf{Meriani.} \\ \mathbf{T.} & \mathbf{pullus.} \end{array}\right.$					2						T. costata includes a group. Species so named from the Yorkshire Middle Oolites now referred to T. denticulata, T. Meriani, and T. pullus.
denticulata, Ag., v. Tab. II.	D	$\mathbf{L}_{1}^{\mathbf{P}}$									May include the T. pullus, of Leck, Kell. list.
elongata, var., lata, Lyc., v. Tab. II.	Cb	Jm Ly Le f									

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.											
Trigonia—cont.											
geographica, Ag., Étud. Crit. Trig., p. 25, t. 10, f. 7; Lyo., p. 69, pi. x., f. 6.					Ly P 5 Jm			P			Very rare. Lyo. (pl. x., f. 6) in Jm.
Hudlestoni , Lyc., p. 194, pl. xxxiv., f. 5, 6; pl. xxxix., f. 1a, 2.					H						
Meriani, Ag., Trig., p. 41, t. xi., f. 9; Lyc., p. 167, pl. xxxiii., f. 1, 2, 3; T. costata, Y. & B., pl. viii., f. 19; Phil., G. Y., 1829, p. 228.					H 2 5 P 2 5 Jm 2						T. costata of all the Malton and Pickering lists. Lyc., p. 170. Lyc. (pl. xxxiii., f. 1, 2) in Jm.
paucicosta, Lyc., p. 57, pl. xi., f. 8, 9; pl. xvi., f. 7; p. 206, pl. xxxvii., f. 3; <i>T. angulata</i> , Lyc., p. 54, pl. xiv., f. 5, 6; pl. xxxviii., f. 7, 8, 9.		Ly P H Jm			5						Nearly allied to <i>T. angulata</i> . Types in Jm.
 perlata, Ag., Trig., p. 19, pl. iii., f. 9-11; Lyc., p. 22, pl. iii., f. 1, 2, 3; T. clavellata, Y. & B., pl. viii., f. 18. 		ì		H	P 2 Ly Jn	1					Lyc. (pl. iii., f. 1, 3) in Jm, (f. 2 in Leck. Coll.
pullus?, Sow., v. Tab. II.	D	Le			\$ \$ 2					1	T. denticulata may be in
rupellensis, d'Orb., Prod. II., p. 17; Lyc., p. 28, pl. viii., f. 4; pl. xxxv1, f. 1-4; T. clavellata, Leck., Q. J. G. S., xv., p. 8.		Ly H P Le Jm									tended. Lyc. (pl. viii., f. 4) in Leck Coll. (pl. xxxvi., f. 1-4) in Jm.
snaintonensis, Lyc., p. 194, pl. xli., f. 1, 2; Hud., Proc. Geol. Assoc., v. p. 477, pl. v., f. 14.		K 6		H 1 5							Type in Hud. Coll.
triquetra, Seebach, Hannover. Jura, p. 117, pl. ii., f. 5; Lyc., p. 26, pl. vif. 1 a, b, 2.				Jn H	n 2	19					Lyc. (pl. vi., f. 1) in Jm.
Voltzit, Ag., Trig., p. 23, pl. ix., f. 10-12; Oppel, Juraf., pl. 719; Lyc., p. 20, pl. x., f. 1, 2; T. clavellata, Morris, Cat. (pars).				l			H				Single specimen.

											<u> </u>
Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
(DIMYARIA)—cont.		İ		}						1	
Trigonia—cont.											
Williamsoni, Lyc., p. 53, pl. xvi., f. 8.		Ly l P l Jm									Rare. Type in Jm.
sp. (narrow costate form).		1				H					
Unicardium: depressum, Phil., v. Tab. II.	G.L.	Le 1 K			H ₂						
gibbosum, L. & M., v. Tab. II.	M	Jm			5						
plenum, Bl. & H., Q. J. G. S., xxxiii., p. 396.		1			H 5						Leck. Coll.
sulcatum, Leck., Q. J. G. S., xv., p. 14, pl. iii., f. 11,	Cb.	Le P									Type in Leck. Coll.
sp.		ĺ		ļ	H						Single specimen. C.O., Ness.
Unio humatus, Brown, v. Cardinia humata, Tab. II,											
SCAPHOPODA,									ŀ		
Dentalium: annulatum, Bean, v. D. entaloides.											
entaloides, Desl., v. Tab. II.	D	Le H		P H 1				P			Phil. (pl. iv., f. 37) in Sm.
				Jm	Ì			1	1		Υ .
GASTEROPODA Actæon:									1		
retusus, Phil., G. Y., pl. iv., f. 27; d'Orb., Prod. I., p. 353; Hud., Geol. Mag., 1881, p. 127, pl. iv., f. 7; (Cylindrites), Hud., Proc. Geol. Assoc., v., p. 485.		Le			H	H 1 5		P			Hud. (pl. iv., f. 7) in Leck. Coll.
Actæonina :								1			
sp.					H				1		Q. J. G. S., xxxiii., p. 318.
Akera, v. Bulla.											
Alaria: bispinosa, Phil., (Rostellaria) G. Y., pl. iv., f. 33; Ppl. vi., f. 13; Hnd., Geol. Mas 1884, p. 151, pl. vi., f. 7, 7a; Ibid., 1880, p. 532 pl. xvii., f. 6 a, b, c; Pterocera cassiope, d'Orb., Prod. I., p. 356; Alaria cassiope, Piette, Cont. dele Pal, Fr., vol. iii., p. 154, pl. 24, . I-4	i	Le P 1 H K		H P Jm	J _m						Specimens in Sm. appear to be those figured by Phillips. Hud. (pl. vi., f. 7) in Ym., (pl. xvii., f. 6a) in Jm., and (pl. xvii., f. 6c) in Leck Coll.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low, Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst,	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Alaria—cont. bispinosa, var. pinguis, Hud., Geol. Mag., 1884, p. 152, pl. vi., f. 9, 10. cassiope, d'Orb., v. Al. bispinosa.		H									Types in Leck. Coll.
mosensis, Buvig., (Rostellaria) Géol. de la Meuse, p. 43, pl. xxviii., f. 26.									н		
cf. tridactyla, Buvig., (Eostellaria) Mém. Soc. Philom. Verdun., t. ii., p. 249, pl. vi., f. 17; (Pterocera), d'Orb. Prod. I., p. 356; Piette, Pal. Fr., T. J., Liv. 12, t. iii., p. 135, pl. 84, f. 9 and pl. 41, f. 8-12; De Lor., 1874, Mém. Soc. Phys. Genéve, t. xxiii., p. 392, pl. x., f. 24.						H ₅					
trifida, Phil, (Rostellaria) G. Y., pl. v., f. 14; Desl., Mém. Soc. Linn. Norm., vii., p. 171, pl. 9, f. 27-29; L. & M., p. 21, pl. 3, f. 11; Piette, Pal. Fr., t. iii. (Gast.) p. 149, pl. 37, f. 1-5; Hud., Geol. Mag., 1884, p. 193, pl. vi., f. 11; pl. vii., f. 1-3; Pterocera trifida, d'Orb., Prod. I. p. 357.		H Jm	HP						La	,	Hud. (pl. vi., f. 11., and pl. vii., f. 1-3) in Leck. Coll.
? sp., Hud., Geol. Mag., 1884, p. 199. pl. vii., f. 8; "Fusus, Scarborough," Bean, MS.		H 1									Bean, Coll. Bm.
sp.						H					Proc. Geol. Assoc., v., p. 484.
Amberleya: armigera?, Lycett, v., Tab. II. Buvignieri, d'Orb., (Turbo) T. J., ii., p. 256, f. 6-8.	Cb.	Le 1				H 1 5					Littorina ornata of Leck
clavata , Bean, (<i>Turbo</i>); Hud., Geol. Mag., 1884, p. 247, pl. viii., f. 8.			H Bn Yn								Near to Turbo ornatus, Sow. Type in Bean Coll. Bm.
princeps, Röm., (Turbo) Verst. Ool., p. 153, pl. xi., f. 1; d'Orb., T. J., ii., p. 357, pl. 335, f. 9, 10; Hud., Geol. Mag., 1880, p. 537, pl. xvii., f. 11.						H ₅					Hud. (pl. xvii., f. 11) in Strick land Coll.
Stricklandi , Hud., Geol. Mag., 1380, p. 536, pl. xvii., f. 10.						H					Type in Strickland Coll.
Aporrhais : sp.						Sm	•				Single apecimen, Scarboroug Museum allied to <i>Chenope</i> <i>elegans</i> , Piette, T. J., III., p 85, f. 12, 13 (<i>Fide</i> Hud.).
Avellana: obsoleta, Phil., G. Y., pl. ii., f. 40.										Li	

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Mid. Lst.	Mid, Calc, Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portiandian Beds.	Remarks.
Bulla: Beaugrandi, De Loriol, (Akera) Et. Sup. Jura. de Boulogne, Mém. Soc. Phys. Genève, t. xxiii., p. 388, pl.vi., f. 1; Hud., Geol. Mag., 1881, p. 126, pl. iv., f. 6.						H					Hud. (pl. iv., f. 6) in Hudleston Coll.
Cerithium: abbreviatum, Leck., Q. J. G. S., xv p. 13, pl. iii., f. 12; Hud., Geol. Mag., 1884, p. 63. bicinctum, Hud., Geol. Mag., 1890, p. 483, pl. xvi., f. 4 a, b.		Le 1 P 1				H					Type in Leck, Coll, Near to C. michaelense, Type in Leck, Coll,
Culleni, Leck., Q. J. G. S., xv., p. 13, pl. iii., f. 13; Hud., Geol. Mag., 1884, p. 54, pl. iii., f. 5.		Le 1 H 1 P 1 K									Allied to C. muricatum. Type in Leck. Coll.
gradatum, Hud., Geol. Mag., 1880, p. 484, pl. xvi., f. 5a, b (non Moore); <i>Cerithium</i> , sp. Bl. & H., Q. J. G. S., xxxiii., p. 394, pl. xiv., f. 2.		6			H						Rare. York Museum. Near to C. virdunense, Buvig., in Q. J. G. S., xxxiii., pp. 361, 394.
grandineum, Buvig., Géol. de la Meuse, p. 40, pl. iv., f. 2; Hud., Geol. Mag., 1880, p. 482, pl. xvi., f. 2 a, b, c.						Ą					Allied to C. limæforme. The Yorkshire form is slightly different from Buvignier's figure. Hud. (pl. xvi., f. 2) in Leck, Coll.
humbertinum, Buvig., Géol. de la Meuse, p. 41, pl. xxviii., f. 8; Hud., Geol. Mag., 1880, p. 493, pl. xvi., f. 8 a, b, c.						H					Allied to C. limæforme. Hud. (pl. xvi., f. 3) in Strick- land Coll.
inornatum, Buvig., Géol. de la Meuse, p. 41, pl. xxvii., f. 17, 18; Hud., Geol. Mag., 1880, p. 484, pl. xvi., f. 6 a, b, c.					H	H					Hud. (pl. xvi., f. 6) in Strick- land and Hudleston Coll.
limæforme, Röm., Verst. Ool., p. 142, t. xi., f. 19; Buvig., Géol. de la Meuse, p. 41, iv., f. 3; Hud., Geol. Mag., 1880, p. 481, pl. xvi., I a, b, e.					H 3 P 2	H Jm					Hud. (pl. xvi., f. 1) in Hudleston Coll.
michaelense, Buvig., Geol. de la Meuse, p. 41, pl. xxvii., f. 30.						H					Very rare. Blake Coll.
muricatum, Sow., v. Tab. II.	U.L			H P 1 5	H 3 5	S ?		Jm S			Hudleston states that this species never ascends into the Coral Rag.
russiense, d'Orb., Murch. Russia, 2, p. 453, pl. 38, f. 9; Hud., Geol. Mag., 1880, p. 402, pl. xiv., f. 8 a, b, c.				H	H ₂						Allied to C. muricatum. Hud. (pl. xiv., f. 8)in Hudleston Coll.
trinodule. Buvig., Geol. de la Meuse, p. 41, pl. xxvii., f. 24.						Sm				,	Very rare.
sp.		K 6				,					

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone,	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Chemnitzia: cf. clytia?, d'Orb., Prod. II., p. 2. ef. corallina, d'Orb., T. J., ii., p. 69, pl. 250, f. 1, 2; Hud Geol. Mag., 1880, p. 396, pl. xiii., f. 4. heddingtonensis, Sow., M. C., t. 39, f. 2; Hud., Geol. Mag., 1880, p. 391, pl. xiii., f. 1 a, b, c, d. langtonensis, Bl. & H., Q. J. G. S., vol. xxxiii., p. 393, pl. xiii., f. 3; Hud., Geol. Mag., 1880, p. 395, pl. xiii., f. 2. lineata, Leck., Q. J. G. S., xv., p. 13, pl. iii., f. 14 (non Sow.). melanioides, Phil., G. Y., pl. iv., f. 13. pollux, d'Orb., Prod. II., p. 2; T. J., ii., p. 62, pl. 247, f. 1; Hud., Geol. Mag., 1880, p. 394, pl. xiii., f. 3 (non 2). vittata?, Phil., v. Tab. II.	D	Le i P		H 1 2 S 1 2 2	H 7 S 1 2	H 1 H 3 5 Jm 1 5 H 5		P 5 S			Hud. (pl. xiii., f. 4) in Leck Coll. Hud. (pl. xiii., f. 1) in Hudleston Cell. Type in Hudleston Coll. ? Eulima. See Hud. Geol. Mag., 1882, p. 246. Type in Leck. Coll. ? Ch. heddingtonensis. See Hud., Geol. Mag., 1882, p. 242 also 1880, p. 396. Very rare. Hud. (pl. xiii., f. 3) in Hudleston Coll.
Cirrus: depressus, Phil., v. Pleurotomaria. Cylindrites: elongatus, Phil., (Bulla) G. Y., pl. iv. f. 7; Hud., Geol. Mag., 1881, p. 127, pl. iv., f. 8. retusa, Hud., v. Aetæonina. sp. Hud., Geol. Mag., 1881, p. 128, pl. iv., f. 9; ? C. Lhuidii, Whiteaves, Ann. Mag. Nat. Hist., 1861, p. 145. Delphinula: muricata, Buvig., v. Turbo funieulatus. Ditremaria: armata, d'Orb., v. Trochotoma tornatilis. Eucyclus, v. Amberleya.				H 1 2 Sr 2	H;	Ħ		P 1 5 Jm	man of contract management from		Hud. (pl. iv., f. 8) in Hudleston Coll. Type in Hudleston Coll.

Species,	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds,	Remarks.
Littorina: funiculatus, Phil., v. Turbo. muricata, Sow., (Turbo) M. C., t. 240; Hud., Geol. Mag., 1880, p. 534, pl. xvii., f. 7, 8, 9.					H 1 2 3	H 3 5 Jm 5 S 2		P			
muricata, var. cf. Meriani, Goldf., (<i>Turbo</i>) Petref., iii., p. 97. pl. 193, f. 16; d'Orh., T. J., p. 355, pl. 355, f. 1-5; Hud., loc. cit., f. 7 a, b.				H							Hud. (pl. xvii., f. 7) in Leck Coll.
muricata, var. muricatula, Y. & B., (<i>Turbo</i>), p. 247, pl. xi., f. 11; Hud., loc. cit., f. 8 a, b.						H					Hud. (pl. xvii., f. 8) in Hudles ton Coll.
muricata, var. cf. pulcher- rima, Dollf., Kim. du Cap de la Heve, p. 46, pl. vi., f. 3-6; Hud., loc. cit., f. 9 a, b.						H					Hud. (pl. xvii., 1. 9) in Hudles ton Coll.
sp. cf. Phillipsii , L. & M., pl. xv., f. 12; Hud., Geol. Mag., 1884, p. 244, pl. viii., f. 3, 4.		H	H								Allied to L. muricata. See also Tab. II. Hud. (pl. viii., f. 3, 4) in Leck Coll.
punctura, Bean., v. Natica.		i					- 1				
Murex: haccanensis, Phil., G. Y., pl. iv., f. 18.		H ?						P			"C. O. Hackness," (Phil.) Single specimen in Scarb Museum,
nodulata, Y. & B., tuberosa, Sow.,											
Natica: arguta, Phil., MS., Hud., Geol. Mag., 1880, p. 296, pl. ix., f. 4, 5 a, b.						H 3 5 Jm		P 5			? N. clio, d'Orb., Q. J. G. S. xxxiii., pp. 372, 379. Near to Natica calypso, d'Orb., T. J., p. 202, Atlas, pl. 292, f. 9, 10 (Fide Hud.). Types in York Museum and Leck, Coll.
buccinoidea, Hud., Geol. Mag., 1880, p. 293, pl. ix., f. 1 a, b; Nerita (like maxima, Dillwyn), Y. & B., 1822, p. 244, pl. xi., f. 2; Ampullaria (like sigaretina, Sow.), Y. & B., 1828, p. 249, pl. xi., f. 2; Natica globosa, Hud., Proc. Geol. Assoc., v., p. 483.						H 5					Mr. Hudleston has misread Y. & B. explanation of their figure. A. buccinoidea is a Lias shell and is not figured by them. Type in Hud. Coll. Includes N. grandis. Münst. and N. globosa, Röm, of Hudleston's lists.
calypso, d'Orb., var. tenuis, Hud., Geol. Mag., 1882, p. 202, pl. v., f. 13.				H							Type in Leck. Coll.
clio, d'Orb., v., N. arguta.	-										

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Clymenia, d'Orb., Prod. I., p. 353; T. J., ii., p. 201, pl. 292, f. 7, 8; Hud., Geol. Mag., 1880, p. 295, pl. ix, f. 2 s, b. clytia, d'Orb., Prod. I., p. 353; T. J., ii., p. 200, pl. 292, f. 3, 4; Hud., Geol. Mag., 1880, p. 296, pl. ix, f. 3. decussata, Münst., v. Neritopsis. globosa, Röm., V. N. bucci-						H 1 5					? = N. intermedia, L. & M. Hud. (pl. ix., f. 2) in Strick- land Coll. Hud. (pl. ix.,f. 3) in Hudleston Coll.
grandis, Münst., S noidea. punctura, Bean, v. Tab. II.	D	H Le 1		H.							Hud. (pl. v., f. 12) in Leck.
Nerinæa: allongiuscula, Bean., y. N. sp. clymene, d'Orb., v. N. Moreana. calypsoides, Thurm., v. Pseudo- melania.		1									? N. allica, d'Orb. See Hud., Geol. Mag., 1880, p. 530.
fasciata, Röm., v. N. Römeri. fusiformis, d'Orb., Prod., ii., p. 6; T. J., ii., p. 101, pl. 257, f. 3-5; Hud., Geol. Mag., 1880, p. 486, pl. xvi., f. 7 a, b.					H	? H					Hud. (pl. xvi., f. 7) in Leck.
Goodhallii, Sow., Geol. Traus., ser. 2, vol. iv., p. 348, t. 23, f. 12; Hud., Geol. Mag., 1880, p. 531, pl. xvii., f. 4.						H	-				Near to <i>N. tuberbculosa</i> , Röm Type in York Museum.
moreana, d'Orb., (N. moreau- iana) Revue Zool., p. 319; T. J., ii., p. 100, pl. 257, f. 1, 2; Buvig., Géol. de la Meuse, p. 35, pl. xxiv., f. 10-13; Hud., Geol. Mag., 1880, p. 487, pl. xvi., f. 8 a, b; N. cly- mene, u'Orb., T. J., p. 102, p. 258, f. 1, 2; N. tornatella, Buvig., pl. xxiv., f. 10-13.						H 1 5 5					Hud. (pl. xvi., f. 8) in Strick land Coll.
pseudo-visurgis, Hud., Geol. Mag., 1830, p. 529, pl. xvii., f. 1; N. visurgis, Auct.; Hud., Geol. Assoc., v., p. 475, pl. iv., f. 1 a, b (non Röm.).				H	H 1 2 5 5 8				P		Nerinæa visurgis, Röm (Phil.). Hud. (pl. xvii., f. 1) in Leck Coll., (pl. iv., f. 1a) in Ym- and (f.1b) in Hudleston Col
Römeri, Phillippi, Neues Jahrb., 1837, p. 294, pl. iii., f. 1, 2; Goldf., Petref., t. 176, f. 5; Hud., Geol. Assoc., v. p. 475, pl. iv., f. 2 a, b, c; Geol. Mag., 1880, p. 530, pl. xvii. f. 2 a, b; N. fasciata, Röm., Verst. Ool., p. 144, pl. xi., f. 31 (non Voltz).					F 3 5	1 1					Possibly occurs in L. L. (Hud.) This appears to be the N. fasciata, Voltz, in Blake an Hudleston's lists, Q. J. G. S. vol. xxxiii. Hud. (pl. iv., f., 2 and pl. xvii f. 2) in Hudleston and Leol Colls.
tornatella, Buvig., v. N. moreana. visurgis. Auct., v. N. pscudo- visurgis.							,				

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Nerinæa—cont.											
sp. , Hud., Geol. Assoc., v., p. 476, pl. iv., f. 3; Hud., Geol. Mag., 1880, p. 531, pl. xvii., f. 3 a, b; ? N. allongiuscula, Bean.						H ₅					Hud. Coll.
Nerita: BULLATA, Phil., MS., G. Y., p. 258.								Р			It is doubtful if the genus Nerita occurs in the Middle Oolites. See Hud., Gcol. Mag., 1881, p. 49
lævigata, Bean, v. Turbo corallensis.				١.							
sp. , Hud., Q. J. G. S., xxxiii., p. 379.						H		ŀ			
Neritopsis: corallensis, Buvig., v. N. decussata.											
decussata, Münst. (Natica) Goldf., Petref. pt. 3, p. 119, pl. 199, f. 10; d'Orb., Prod. II., p. 7; T. J., ii., p. 227, pl. 301, f. 8-10; Hud., Geol. Mag., 1881, p. 51, pl. iii., f. 1; N. corallensis, Buvig., Géol. de la Meuse, p. 31, pl. 22, f. 38-40.						Ą					Very rare. Hud. (pl. iii., f. 1) in Strick- land Coll.
Guerrei, Heb. & Desl., Mém. Soc. Linn. Norm., v., p. 195, pl. i., f. 4; Hud., Geol. Mag., 1881, p. 49, pl. iii., f., 3 a, b, c.						H 1 5		P			Hud. (pl. iii., f. 3 a, b) in Strick- land and, (f. 3 c) in Leck. Coll.
moreana, d'Orb., Prod., II., p. 7; T. J., ii., p. 226, pl. 301, f. 5-7; Hud., Geol. Mag., 1881, p. 51, pl. iii., f. 2 a, b.						H ?					Single speciment in Strickland Coll.
sp. Hud., Geol. Mag., 1884, p. 302, pl. ix., f. 13 a, b.		H Cm Sm									⁹ N. Guerrei. Very rare. Leck. Coll. and Scarb. Museum. NaticaGuerrei of Leckenby's list. See Wright, Proc. Cottesw. Nat. Club, 1869, p. 211, Type in Leck. Coll.
Patella:		τ.							İ		
graphica , Leck., Q. J. G. S., xv., p. 13, pl. 3, f. 3; Hud., Geol. Mag., 1885, p. 158, pl. iv., f. 7, 7a.		Le P									Single specimen, Bean. Coll. British Museum.
latissima, Sow., v. Discina.		1									
mosensis, Buvig., v. P. rugosa.									1		
rugosa, Sow., var. M. C., t. 139, f. 6; L. & M., p. 89, pl. xii., f. 1, 1a-g; Hud., Geol. Mag., 1881, p. 125, pl. iv., f. 5; <i>P. mosensis</i> , Buvig., Géol. de la Meuse, p. 27, pl. 21, f. 3-4.						H	H				Hud. (pl. iv., f. 5) in Strick- land Coll.
Phasianella: elegans, L. & M., v. Pseudomelania Buvignieri.											

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Phasianella-cont.											
striata , Sow., (<i>Melania</i>) M. C., t. 47; Hud., Geol. Mag., 1880, p. 396, pl. xiv., f. 1 a, h.	P				H 2 3 5 Jm 1 S 1	H 1 2 S 1		Ps			See also Tah. II. There is some doubt whether this is the same as the Grey Limestone species. Hud. (pl. xiv. f. 1a) in Hudleston Coll., (f. 1b), in Leck. Coll.
striata, var. bartonensis, Hud., Geol. Mag., 1880, p. 398, pl. xiv., f. 2.			,		2	H					Type in Hudleston Coll.
Pieurotomaria :				2							
Agassizii, Münst., Goldf., Petref., pt. 3. p. 71, pl. 186, f. 9; d'Orb., ft. J., ii., p. 572, pl. 426, f. 1-5; Hud., Geol. Mag., 1881, p. 124, pl. iv., f. 4 a, b.						H 5					Strick Coll. Allied to P anglica. ? "P. moreana, Buvig." in Bl. & H. Q. J. G. S., xxxiii., p. 379. This latter species which is described in the text as P. mosensis, is from
arenosa, Leck., v. P. guttata.						:	:				the Kimcridge Clay of Mau- vage.
bicarinata, Sow., (Trochus) M. C., t. 221, f. 2.				P							These two species are very doubtful. See Hud., Geol. Mag., 1885, p. 155.
cingulata, Phil., G. Y., pl. iv., f. 28.				P							Type in York Museum.
depressa, Phil., (Cirrus) G. Y., pl. vi., f. 12; d'Orb., Prod., I., p. 333; Hud., Geol. Mag., 1885, p. 151, pl. iv., f. 1, 2, 2a; P. stricta, Leck., Q. J. G. S., xv., p. 12. pl. iii., f. 2; P. montreutlensis, H. & D., Foss, Mont. Bellay, p. 68, pl. v., f. 3.		H Le P 1 Jm	н								Allied to P. granulata, Type in York Museum, Hud. (pl. iv., f. 1) in Ym, and (f. 2) in Leck, Coll.
granulata, Lyc., v. Tab. II.	Съ.	H	н	H P							Hud. (pl. iii., f. 9) in Leck. Coll. and (f. 10) in Ym.
guttata, Phil., (Trochus) G. Y., pl. vi., f. 14; d'Orb., Pred., I., p. 333; Hud., Geol. Mag., 1885, p. 153, pl. iv., f. 3, 3a, 4; P. arenosa, Leck., Q. J. G. S., xv., p. 12, pl. 3, f. 1.		Ħ		5				; ;			Specimen in Sm. appears to be Phil. type. P. aremosa is merely the well-preserved condition of P. gultata; see note by Leck-chy in Wright, Proc. Cottesw. Nat. Cluh, 1899, p.
montreuilensis, H. & D., v. P. depressa.											211. Type of P. arenosa, which is refigured by Hudleston (pl
Munsteri, Röm., Verst. Ool. Nachtr., p. 44, pl. xx., f. 12; d'Orb., T. J., ii., p. 549, pl. 416, f. 4-8; Hud., Geol. Mag., 1881, p. 123.				H	Ħ						iv., f. 3), is in Bean Coll. Bm. and (f. 4) in Leck. Coll. P. gramulata. Sow., Lower Calc. Grit, Filey Brig." of Leck. Coll. (Hud.).
reticulata, Sow., M. C., t. 272, f. 2: Hud., Geol. Mag., 1881, p. 123, pl. iv., f. 3.				H	H	H 5		P	,		Rare. Hud. (pl. iv., f. 3) in Hudleston Coll.
striata, Leck., v. P. depressa.				•							
sp. Hud., Geol. Mag., 1881, p. 121 pl. iv., f. 2 a, b, c.				H							Hud.Coll. near te P. granulata, Sow. and P. Münsteri, Röm.

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, Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Pseudomelania:										-	
Buvignieri ?, d'Orb., T. J., ii., p. 325, pl. 325, f. 3-5; Hud., Geol. Mag., 1880, p. 399, pl. xiv., f. 4 a, b.					H	H					Phasianella elegans, L. & M. of some collections. Hud. (pl.xiv., f. 4a) in Hudleston Coll., (f. 4b) in Strickland
calypsoides, Thurm. (Nerinæa) Leth. Brun., pl. vi., f. 20.						H.?					Coll. Very rare. Scarb. Museum.
gracilis, Hud., Geol. Mag., 1880, p. 398, pl. xiv., f. 3 a, b.						H					Hud. (pl. xiv., f. 3a), in Leck., and (f. 3b) in Strickland
Leymeriei, d'Arch., Soc. Géol. Fr., v., t. 28, f. 12; L. & M., p. 74, pl. xii., f. 31, 31 a, 32; Hud., Geol. Mag., 1880, p. 400, pl. xiv., f. 6.				Ą							Coll. Hud. type in Hudleston Coll.
sp. Hud., Geol. Mag., 1880, p. 400, pl. xiv., f. 5; Proc. Geol. Assoc., v., p. 476, pl. iv., f. 4.						Ħ					Type in Hudleston Coll.
Pterocera:						н					Single specimen, urchin beds
cassiope, d'Orb., v. Alaria bis- pinosa.						-5					N. Grimston.
tridactyla,'d'Orb., trifida, d'Orb.,											
Purpurina: condensata, Heb. & Desl., Foss. de Mont. Bellay, p. 26, pl. i., f. 8 a-d; Hud., Geol. Mag., 1882, p. 196, pl. v., f. 3 a, b; Turbo liratus, Bean, MS.	Cb.	H Le									Turbo elaboratus of Leckenby's list. Hud. (pl. v., f. 3) in Bean Coll. Bm.
Purpuroidea: nodulata, Y. & B. (Murex) p. 244, pl. xi., f. 3; Hud., Geol. Mag., 1880, p. 289, pl. viii., f. 1, 2, 4.						H Jm					P. nodulata, L. & M., pl. v. f. 1-4, is probably a different species. Hud. (pi. viii., f. 1, 2) in York Museum and (f. 4) in Hudles-
tuberosa , Sow., (<i>Murex</i>) M. C., t. 578, f. 4; Hud., Geol. Mag., 1880, p. 292, pl. viii., f. 3 a, b.						H					ton Coll. Sowerby's type was a cast from the "Pisolite at Malton." Hud. (pl. viii., f. 3) in Leck, Coll.
sp. Hud., Geol. Mag., 1880, p. 293.						H ₅					Deta. Com
Rostellaria, v. Alaria. Trochotoma:											
discoidea, L. & M., v. T. tornatilis. tornatilis, Phil., (Trochus) G.Y., pl. iv., f. 16; Hud., Geol. Mag 1881, p. 119, pl. iv., f. 1a, b; Trochus discoideus, Röm., Verst. Ool., p. 150, pl. xi., f. 12; Trochotoma discoidea, I., & M., p. 84, pl. x. f. 10; Buvin. Géol. de la Meuse, p. 39, pl. 25, t. 10, 11; Ditremaria armata, d'Orb., "I'. J., ii., p. 389, pl. 343, f. 3-8.						H 5 Jm 1		ř			Misprinted T. tornata in last ed., Phil., G. Y., p. 259; also in Q. J. G. S., xxiii., p. 379. Hud. (pl. iv., f. 1) in Strickland Coll. Specimens in Scarborough Museum labelled Solarium sutcatum.

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Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Trochus :		Π	Ì					İ		Ī	
acuticarina, Buvig., Géol. de la Meuse, p. 38, pl. 25, f. 31, 32; Hud., Proc. Geol. Assoc., v., p. 476, pl. iv., f. 5; Geol. Mag., 1881, p. 57, pl. iii., f. 10,						H ?					Single specimen, Leck, Coll.
aytonensis, Bl. & H., Q. J. G. S., xxxiii., p. 395. pl. xiv., f. 1 d; Hud., Geol. Mag., 1881, p. 58, pl. iii., f. 12.					H	Ħ					Hud. (pl. iii., f. 12) is in Leck. Coll.
bicarinatus, Sow., v. Pleuroto- maria.										1	
discoideus, Röm., v. Trochotoma tornatilis.									Ì		
granularis, Hud., Geol. Mag., 1881, p. 57, pl. iii., f. 11 a, b.								н			Very rare. Leck. Coll. Not the species for which the name "granularis" is sug- gested in Proc. Geol. Assoc.
guttatus, Phil., v. Pleurotomaria.		Ì						l	ļ		gested in Proc. Geol. Assoc v., p. 484.
inornatus, Buvig., v. T. obsoletus.											
obsoletus, Röm., Verst. Ool., p. 151, pl. xi., f. 5; Hud., Geol. Mag., 1881, p. 56, pl. iii., f. 9; Trochus inornatus, Buyig., Géol. de la Meuse, p. 37, pl. 26, f. 23, 24; Hud., Proc. Geol. Assoc., v., p. 476, pl. iv., f. 7.				Ħ							Hud. (pl. iii., f. 9) in Hudleston Coll.
tornatilis, Phil., v. Trochotoma.											
sp. Hud., Geol. Mag., 1881, p. 58, pl. iü., f. 13.						Ħ		l	١		Hud. Coll. ? T. michaelensis. Buvig., of Hud., Geol. Assor., v. 484.
Turbo: Buvignieri, d'Orb., olavata, Bean, v. Amberle ya.											
clavata, Bean,		l							l		
coraliensis, Buvig., Géol. de la Meuse, p. 37, pl. 24, f. 21, 22; Hud., Proc. Geol. Assoc., v., p. 475, pl. iv., f. 8; Geol. Mag., 1881, p. 52, pl. iii., f. 4 a, b.						H 1 5					Rarc. Allied to Crossostoma discoideum, L. & M., pl. xi., f. 7. Probably the Nerita lævigata of Bean's identifi- cation. Hud. (pl. iii., f. 4) in author's Coll.
elaboratus, Auct., v. Purpurina condensata.											
erinus, d'Orb., Prod. II., p. 9; T. J., ii., p. 362, pl. 336, f. 12-14; Hud., Geol. Mag., 1881, p. 53, pl. iii., f. 5 a, b; Turbo inornatus, Buvig, Géol. de la Meuse, p. 37, pl. 26, f. 27, 28.						Ħ					Hud. (pl. iii., f. 5) in Strickland Coll.
funiculatus, Phil., G. Y., pl. iv., f. 11; (Littorina) Phil., 1875; Hud., Geol. Mag., 1881. p. 54, pl. iii., f. 7 a, b; Detphimula muricata, Buvig., Mem. Soc. Verd., p. 243, pl. iv., f. 31, 32; Géol. de la Meuse, p. 35, pl. 32, f. 19-21; De Lor., and Pellat, Jur. sup. de Boul., Mém Soc. Phys. Genève, t. xxiii., p. 365, pl. ix., f. 30-38.	D.					H 1 Jm		H P 5			Hud. (pl. iii., f. 7) m Strickland Coll.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid, Cale, Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Furbo-cont.											
inornatus, Buvig., v. T. erinus.									ı		
Iævis, Buvig., Géol. de la Meuse, p. 37, pl. 26, f. 29-30; Hud., Proc. Geol. Assoc., v., p.; 476, pl. iv., f. 6; Geol. Mag., 1881, p. 54, pl. iii., f. 6.						H 1 5					Hud. (pl. iv., f. 6) in Leck and (pl. iii., f. 6) in Strick- land Coll.
liratus, Bean, v. Purpurina con- densata.				!							
Meriani,Goldf., muricatulus, Y. & B.,											
Pellati, De Loriol, Jur. Sup. de Boulogne, loc. cit., t. xxiii., p. 367, pl. ix., f. 34, 36; Hud., Geol. Mag., 1881, p. 56, pl. iii., f. 8 a, b.						H					Single specimen, Hud. Coll.
princeps, Röm., v. Amberleya.								ŀ	l		
sulcostomus , Phil., G. Y., pl. vi., f. 10; d'Orb., Prod. I., p. 383; Hud., Geol. Mag., 1884, p. 246, pl. viii., f. 6, 6a, 7.		P 1									Type in York Museum. Hud. (pi. viii., f. 6) in Leck. Coll. and (f. 7) in Bean Coll. Bm.
sp.		K 6	!								
CEPHALOPODA.									ĺ		
Ammonites:		l									
acanthicus, Oppel, Pal. Mitth., p. 219.									Mm 5		
achilles , d'Orb., T. J. , p. 540, pls. 206 & 207, f. 1, 2.					S H?	S	H ? S				Near to Am. plicatilis.
ACUTICOSTATUS, Bean, MS.		Le			5		_				Leck. Coll., Cambridge.
alligatus, Bean, Leck., Q. J. G. S., xv., p. 9, pl. ii., f. 2 a, b; ? Am. convolutus, Quenst.		Le P		Wr.							See Wright, Proc. Cottesw. Nat. Club, 1869, p. 210. Type iu Leck. Coll.
alternans, von Buch, Petref. Rem., t. 7, f. 4.		Jm				H	H 2 3 5		J P B Mm		B. & H. give Am. serratus as a syn. of Am. alternans Q. J. G. S., xxxiil., p. 360 f var. of Am. cordatus, Sow Ibid., p. 379. ? var. of Am. vertebralis, Sow. Hudleston, Proc.Geol, Assoc. vol. v., p. 482.
arduennensis, d'Orb., T. J., p. 500, pl. 185, f. 4-7; Am. murrayanus, Simp., MS., Leck., Q. J. G. S., xv., p. 10: Am. subtensis, Bean, MS.		Le P H									A MS. note by Mr. Leckenby states that Am. ardueumensis the young condition of Am. murrayamus-the slende and delicate ribs becoming coarser and more distant a the whorls increase, an

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks,
Ammonites—cont. athleta, Phil., G. Y., pl. vi., f. 19; d'Orb., T. J., p. 457, pl. 163, 104.		Le P 1 H 1 Jm	H								
Bakeriæ, d'Orb., T. J., p. 424, pl. 148 (non Sow.); ? Am. binatus, Bean.		H Jm									It is doubtful if this species occurs in Yorkshire. See note to Am. binatus.
Bakeriæ, Sow., v. Am. binatus.											
Baugieri , d'Orb., T. J., p. 445, pl. 158, f. 5-7.		Le 1 P									
Berryeri, Lesueur, Dollfus, Cap de la Héve, 1863, p. 42, pl. iv., f. 1, 2.		1					H		J B P		
biarmatus, Ziet., v. Am. perar- matus.											
binatus, Bean MS., Leck., Q. J. G. S., pl. xv., p. 10; ? Åm. Bakeriæ, Sow., t. 570, f. 1, 2.		Le P	Wr.	Wr.							It is probable that the Am. binatus, Bean, Am. Bakeriæ, Sow., and Am. Bakeriæ, d'Orb., are distinct species; in which case Am. binatus
bipartitus, Ziet., Würt., p. 18, pl. 13, f. 6; d'Orb., T. J., p. 443, pl. 158, f. 1-4.		Le P 1 H									alone will be the Yorkshire form.
biplex , Sow., M. C., t. 293, f. 1, 2.		Jm S 1	l	S?	S 2 5	8 5	H 1 2 3 S		J B P S La		Represents a group rather than a distinct species.
bispinosus, Ziet., v. Am. longi-							2				
Brightii, Pratt, v. Am. lunula.											
calloviensis, Sow., M. C., t. 104; Bronn, Leth. Geog., p. 459, pl. xv., f. 14; d'Orb., T. J., p. 455, pl. 162, f. 10, 11. canaliculatus, Münst., Ziet., Würt., p. 37, pl. 28, f. 6; von Buch, Petref. remarq., pl. i., f. 6- 8; Bronn, Leth. Geog., p. 430, t. 22, f. 16; d'Orb., T. J., p. 525, pl. 199.		Le 1 Jm 1		H Le 1 Wr							In Leck. Coll. North Newbald (Vernon). Near to Am. hecticus and Am. lunula Rein, and Am. Henrici, d'Orb.
Castor, Ziet., v. Am. Duncani.											
catsna, Sow., v. Am. perarmatus.											

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lsf.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites—cont. cawtonensis, Bl. & H., Q. J. G. S., xxxiii., p. 392, pl. xiii., f. 2, 2a.						н					Hudleston gives this as a variety of <i>Am. vertebralis</i> , Sow., Proc. Geol. Assoc., v., p. 482.
Chamusseti, d'Orb., T. J., p. 437, pl. 155; Am. lenticularis, Phil., G. Y., pl. vi., f. 25.		Le P H H Jm									p. 702e
chauvinianus , d'Orb., T. J., p. 460, pl. 165.		Le P									
Comptoni, Pratt, Anu. N. H., 1841, t. 2, f. 1.		Jm	s								Drewton.
conterminus, Bean, MS Leck., Q. J. G. S., xv., p. 12. convolutus, Quenst., Ceph., t. 13, f. 1-3; Jura, t. 71, f. 9; t. 73,		Le P P Jm H	н	Wr.							Includes a group. Two varieties are given by
f. 14-16. cordatus, Sow., M. C., t. 17, f. 2, 4; d'Orb., T. J., p. 514, pls. 193, 194; Am. maltonensis, Y. & B., xii., f. 10.		Ym	н	H 3 5 S 1 2 5 P 5 Jm	H ₁ 2 5 S 2	н			B		Wright, Proc. Cottesw. Club 1869, p. 222.
cordatus, var. excavatus, Sow., M. C., t. 105; Phil., G. Y.,				H	н			P 5			This is the adult form.
pl. vi., f. 25. crenatus, Brug., Ency. Meth., i., p. 37; d'Orb., T. J., p. 521, p. 197, f. 5, 6; Nautilus dentatus, Rein., p. 73, t. iv., f. 43; Am. cristatus, Sow., M. C., t. 421, f. 3; Am. dentatus, Ziet., Würt., p. 17, pl. 13, f. 2; Quenst., Petref., p. 131, pl. 9, f. 14, 15.		Ħ	н								
decipiens, Sow., M. C., t. 294; d'Orb., T. J., p. 547, pl. 211.							H				
dentatus, Ziet., v. Am. crenatus. diversus f, Phil., G, Y., pl. vi., f. 18 (non Simp.); Am. bifrons, Phil., 1829; and Morris, Cat.		P	į				, and				A very doubtful species.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites—cont. Duncani, Sow., M. C., t. 157; Pbil., G. Y., pl. vi., f. 16; d'Orb., T. J., p. 451, pls. 161, 162; Am. ornatus, Schlotb., Petref., p. 75, Am. Castor, Polluz, Ziet., Würt., p. 15, pl xi., f. 3, 4; Am. spinosus, Sow., M. C., t. 540, f. 2; ? Am. gemmatus, Phil., G. Y., pl. vi., f. 17. Elizabethse, Pratt, Mag. Nat. Hist., pl. i., f. 1-4. eudoxus, d'Orb., T. J., p. 552, pl. 213, f. 3-6; Am. evalidus, Bean, MS. Eugenii, Raspail, Amm., pl. i.; d'Orb., T. J., p. 554, pl. 216, f. 1-3. evalidus, Bean, MS., v. Am. eudoxus.		H Jm 1 P 1 K 6 Le	Я						Le Sm Mm	9	Drewton. Near to Am. pseudomutabilis, Ler. and Am. subundorae, Pav. See Addendum. "This may be the same as Prof. Judd's Am. marantianus?" Blake, Q. J. G. S., xxxi., p. 223.
ercavatus, Sow., v. Am. cordatus. flexicostatus, Phil., G. Y., pl. vi., f. 20; Am. gregarius, Bean, MS., Leck., Q. J. G. S., xv., p. 11. flexuosus, Münst. and Quenst., v. Am. oculatus. funiferus, Phil., G. Y., pl. vi., f. 23; Am. galdrynus, d'Orb T. J., pp. 438, 571, pl. 156. galdrynus, d'Orb., v. Am. funiferus. gemmatus, Phil., v. Am. Duncani. gganteus, d'Orb., v. Am. rotundus. giganteus, d'Orb., v. Am. rotundus. giganteus, d'Orb., T. J., p. 560, pl. 220. glabellus, Bean, MS., Leck., Q. J. G. S., xv., p. 12, pl. ii., f. 5a—c. goliathus, d'Orb., T. J., p. 519, pl. 195, 196.		Le 1 P 1 Jm		H 1 2 3 5	H					J	Specimens thus named probably include Am. portlandicus, d'Orb. and Am. Lamplughi, Pav. See Pavlow, Arg. de Specton, p. 129. The specimen in the Survey Museum appears to be near to Am. gravesianus. ? Am. Sutherlandiæ, Sow.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
mmonites—cont. gowerianus, Sow., M. C., t. 549, f. 2: Phil., G. Y., pl. vi., f. 21; Leck., Q. J. G. S., xv., p. 9, pl. i., f. 1a—d.	r a godin	Le 1 K 6 H 1 4 P 1					, }	A trade gard of the children of the same o			Leck, (pl, i., f. 1 b) in Leck
gravesianus, d'Orb., T. J., p. 559, pl. 219; ? Am. quadrifidus, Bean, MS.	4	Jm 1				:				J Jm La	Specimens thus named have been referred to Am. gravesi formis, Pavlow, loc. cit. p. 124.
gregarius, Bean, v. Am. flexi- costatus. Gulielmi, Sow., M. C., t. 31; Phil., G. Y., pl. vi., f. 15; Am. rowlstonensis, Y. & B., t. 13, f. 10; Am. calloviensis, juv., Phil., 1829.	Annu state of the	Le 1 H 1 P 1 Jm				1					Prebably a variety of Am Jason. "It is often marked in cabinets as Am. calloviensis." Leck., loc. cit.
hauffianus, Oppel, Mittl., pt. iii., 1863, p. 211, pl. lvi., f. 1, 2, 3.		Cm									Leck. Coll,
hecticus, Rein., (Nautilus) pl. iv., f. 37, 38; d'Orb., T. J., p. 432, pl. 152.		H	н?						,		
hecticus, var. lunula, Rein., (Nautilus) p. 69, t. 4, f. 35, 36; Ziet., Würt., p. 14, pl. 10, f. 11; Röm., Verst. Ool., Nachtr., p. 48, t. 29, f. 26; d'Orb., T. J., p. 439, pl. 157; Am. Brightti, Lonsdalii, Pratt, 1841, Ann. Mag. N. H., pl. 4, f. 2, 4.		Le 1 H 1 P	11.								
hecticus, var. nodosus, Sow., M. C., t. 92, f. 5.				Jm							
hecticus, var. putealis, Bean, MS., Leck., Q. J. G. S., xv., p. 11; pl. ii., f. 3 a, b, c.		Jm 1 Le 1 P 1 H 1				,					See note by Leckenby in Wright, Proc. Cottesw. Club 1869, p. 210. Type in Leck. Coll.
HEXICOSTATUS,		Le					, ,				Probably a misprint for An flexicostatus. See note b Leckenby in Wright, Pro- Cottesw. Nat. Club, 186
hyperbolicus, Simp., Leck., Q. J. G. S., xv., p. 12; pl. ii., f. 4 a, b. ingens, Y. & B., v. Am. plicatilis.		Le P								•	p. 210. Type in Leck, Coll.

Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolitc.	Kimeridge Clay.	Portlandian Bels.	Remarks.
irius, d'Orb., T. J., p. 562, pl. 222. Jason, Rein., (Nautilus) p. 62, pl. iii., f. 15-17; d'Orb., T. J., p. 446, pl. 159, 160; § Am. gulielmi, Sow.		Ħ	H Sm							J	Proc. Geol. Assoc., iv., p. 381. Probably an extreme form of Am. excavatus. York Museum. Near to Am. Lamplughi, Pavlew, loc. cit., p. 129.
Roenigi , Sow., M. C., t. 263, f. 1-3; Phil., G. Y., pl. vi., f. 24.		Le 1 P 1 6 H 1 K 6 S 6									,
Lamberti, Sow., M. C., t. 242. f. 1-3; Ziet., Würt., p. 36, t. xxviii., f. 1; Bronn., Leth., Geog., p. 438, t. xxii., f. 14; d'Orb., T. J., p. 482, pl. 177, f. 5-11; pl. 178; Am. longævus, Bean; Am. Leachii, Sow., t. 242, f. 4; ? Am. omphaloides, Ibid., f. 5.		Le P 1 H 1 Jm	S						s	?	Am. flexicostatus is allied this. Am. omphaloides, Sow appears to be the Am. Suthe landiae, d'Orb., pl. 177, bu not of Sow.
Leachi, d'Orb., v. Am. Mariæ. Leachii, Sow., v. Am. Lamberti.											
lenticularis, Phil., v. Am. Chamusseti. longævus, Bean, v. Am. Lamberti.					1						
longispinus, Sow., M. C., t. 501 f. 2; d'Orb., T. J., p. 544, pl. 209 Am. bispinosus, Ziet., Würt. pl. xvi., f. 4; Quenst., Petref. p. 195, pl. 16, f. 13.	;									P	
Lonsdalii, Pratt, v. Am. hecticus.											1
lunula, Rein., v. Am. hecticus.									1		
macrocephalus, Schloth., v Tab. II.	. C	b.			-			1	1		
macrocephalus, var. rugo sus, Hud., Geol. Mag., 1882, p 147; Am. rugosus, Leck., Q. J G. S., xv., p. 9.		L I	,								Type in Leck. Coll.
maltonensis, Y. & B., v. Am. cor datus.											9 4m annual - 1001
marantianus, d'Orb., T. J p. 533, pl. 207, f. 3-5.	,	1								J P	? Am. eumelus, d'Orb.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolitc.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites—cont. Mariæ, d'Orb., T. J., p. 486, pl. 179; Am. Leachi. d'Orb., Murch., Russia, 2, p. 488, pl. 35, f. 7-9; Am. Lamberti, Buch, Bull. nat. Moscow, p. 242; Am. vertumnus, Bean, MS., Leck., Q. J. G. S., xv., p. 9, pl. i., f. 3 a, b. modiclaris, Luid., Iconog., p. 19, t. 6, f. 292; d'Orb., T. J., p. 468, pl. 170; Am. sublævis, Sow., M. C., t. 54; Phil., G. Y., pl. vi., f. 22.		H 1 1 K 6 Le 1 S 1 6 P 1 K 6 H 1	н								Type of Am. vertumnus, Leck. Coll.
murrayanus, Simp., v. Am. arduennensis. mutabilis, Sow., M. C., t. 405; d'Orb., T. J., 553, pl. 214. oculatus, Bean, MS., Phil., G. Y., pl. v., f.16; d'Orb., T. J., p. 528, pl. 200, 201, f. 1, 2; Nautilus discus, Rein., p. 60, pl. 2, f. 11, 12; Am. flexuosus, Minst., Ziet. Würt., t. 28, f. 7; Quenst.		Jm	H P						Mm J B P H		Type in York Muscum.
Ceph., pl. 9, f. 1, 2, 4-9. omphaloides, Sow., v. Am. Lamberti. ordinarius, Bean, MS., Leck., Q. J. G. S., xv., p. 8. ornatus, Schloth., v. Am. Duneani.		Le 1 P 1									? Young form of Am. modio- laris.
perarmatus, Sow., M. C., t. 352; Röm., Verst. Ool., p. 204; Quenst., Petref., pl. 16, f. 12 non 7; d'Orb., T. J., p. 498, pls. 184, 185, f. 1-3; Am. catena. Sow., M. C., t. 420; Ziet., t. 1, f. 1; Am. biarmatus, Ziet., Würt., t. i., f. 6.		H? Le 1 Jm	н	H 1 5 P 1 Jm 1 S 5	H S 5	S		P 1 5			
 pickeringius, Y. & B., v. Am. trifidus. placenta, Leck., Q. J. G. S., xv., p. 19, pl. ii., f. 1. plicatilis, Sow., t. 166; d'Orb., T. J., p. 509, pls. 191, 192; ? Am. ingens, Y. & B., pl. xii., f. 2. 		Le P P P		H 1 5 6 5	H 7 P 3 5 S 5	H 5 S					Typs in Leck. Coll. Allied to Am. convolutus.

SPECIES.	Pass down.	Kellaways Rock.	Oxford Clây.	Low. Cale. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
mmonites—cont. plicomphalus, Sew., M. C., t. 359, 404.									P		Kirkby Meerside.
poculum, Bean, MS., Leck., Q. J. G. S., xv., p. 9, pl. i., f. 4 a, b, c.		Le P									Type in Leck. Coll.
Pollux, Ziet., v. Am. Duncani. putealis, Bean, v. Am. hecticus.	į.	Jm 1									
reversus, Simp., MS., Leck., Q. J. G. S., xv., p. 9, pl. 1, f. 2.		Le P									Type in Leck. Cell.
rotundus, Sew., M. C., t. 293, f. 3; d'Orb., T. J., p. 558, pl. 216, f. 3, 4; Am. giganteus, d'Orb., pl. 221, f. 1, 2.	,	1					-		J P Mm		
rowlstonensis, Y. & B., v. Am. Gulielmi.											
rugosus, Leck., v. Am. macrocepha- lus. serratus, Sow., v. Am. alternaus and Am. cerdatus.											
spinosus, Sow., v. Am. Duncani.		l									
sublævis, Sew., v. Am. modielaris.											
subtensis, Bean, v. Am. arduen- nensis.											
sutherlandiæ, Sew., M. C., t. 563; d'Orb., T. J., p. 479, pl. 176, 177, f. 1-4; ? Am. omphaloides, Sew., t. 242, f. 5.	,			P Jm				P 1 5			Near to Am. goliathus, d'Orb
tiziani, Oppel, Pal. Mitth., p. 246	;	Cm			•						Leckenby Cell.
trifidus, Sew., M. C., vol. iii. p. 194 (Am. triplicatus), t. 292, 293, f. 4; Am. pickeringius, Y. & B., p. 254, pl. Xii, f. 12; Am. triplex, Merris, Catalogue.					S 5	S	S		В		
triplex, Sow., v. Am. trifidus.		1									
triplicatus, Sow., M. C., t. 92, f. 2.		Cmi							P J?		Phillips gives this reference but it is probable that An trifidus is the species usuall intended under the nam Am. triplicatus.
TURGIDUS, Bean, MS., Leck., Q. J. G. S., xv., p. 11.		Le 1 P									Deubtful species.
varicostatus, Buckl., Bridg. Treatise, t. 42, f. 7; Phil., Thames Valley, pl. xiv., f. 10; Am. in-		اً		P Jm	H 2 5 P	H	8 2				? Variety of Am. plicatilis.

Species.	Pass down.	Kallaways Rock.	Oxford Clay.	Low, Cale, Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites—cont.		İ				!					
Vernoni, Bean, MS., Phil., G. Y., pl. v., f. 19.			P			!					
vertebralis, Sow., M. C., t. 165; Phil., G. Y., pl. iv., f. 34.			н	P H H 1	H			P 1 5			Allied to Am. cordatus.
vertumnus, Bean, v. Am. Mariæ.				J _m							
Williamsoni, Phil., G.Y., pl. iv., f. 19.				H P				P			Type in Scarborough Museum. Near to Am. arduennensis, d'Orb. and other allied forms mentioned in the Pal. Fr.
yo?, d'Orb., T. J., p. 545, pl. 219.				Jm					J B P		
sp. cf. Thurmanni , Cont., Étud. Kim., 1859, p. 228, pl. iv., f. 1.							H		Jm		B. & H., Q. J. G. S., xxxiii., p. 360.
Ancyloceras 1											
sp.									J		
Belemnites :									ŀ		
abbreviatus, Miller, Geol. Tr., ser. 2, vol. ii., pl. vii., f. 9, 19; Phil., Brit. Bel., p. 124, pl. xxxiv., xxxv., f. 84-93; G. Y., pl. xxv., f. 10; B. excentralis (in part) Y. & B., 1822, pl. xiv., f. 4; B. excentricus, Blainv., Mém. sur les Bel., p. 90, pl. iii., f. 8; d'Orb., T. J., p. 120, pl. 17.			K	P 1 5 H 1 5 Jm 1 S 5	H 7	H 3 5	\$ 5	P 1 5	s		Hudleston gives three varieties of this species. See Proc. Geol. Assoc., v., p. 481.
attenuatus, Mant., v. B. Owenii.				3							
excentralis, Y. & B., v. B. abbre- excentricus, Blainv.,											
explanatus, Phil., v. B. nitidus.											
gracilis, Phil., v. B. hastatus.											
hastatus, Montf. (Hibolithes) Conch. syst., p. 386; Blainv., Mém. sur les Bel., p. 71, pl. ii., f. 4, 4a; d'Orb., T. J., p. 121, pl. xviii., f. 1-9; Quenst., Cepb., p. 442, pl. 29, f. 27-39; Phil., Brit. Bel., p. iii., pl. xxviii., f. 67-70; G. Y., pl. xxvi, f. 3-5; B. semihastatus, Blainv., p. 72, pl. ii., f. 5, 5 a-g; B. gracitis, Phil., G. Y., pl. v., f. 15; B. semihastatus rotundus, and depressus, Quenst., Ceph., p. 440, pl. 29, f. 8-11, & 12-18.		L ₀ H ₁	P H S	P 1 H 1 S 5	H	S	H ?				P. B. subhastatus (Montf.) Hud., Q. J. G. S., xxxiii., p. 386.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low, Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Cora Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Belemnites—cont. lateralis, Phil., G. Y., pl. xxv., f. 8; Y. & B., t. 15, f. 2. nitidus, Pollf., Cap de la Héve.							H		J	La	Kim. Brantingham (Phil. 1st Ed.). Includes Bel. explana; tus, Phil., Bel. explanatoides, Pav., Bel. russiensis, d'Orb., and Bel. subquadratus, Röm. Sec Pavlow, loc. cit., p. 51. B. explanatus is given as a syn. on the authority of Blake,
nitidns, Dollf., Cap de la Héve, 1863, p. 39, pl. iii., f. 2-7; B. explanatus, Phil., Brit. Bel., p. 128, pl. xxxvi. Owenii, Pratt, Phil. Trans., 1844; Quenst., Cepl., pl. xxxvi., f. 9; Phil., Brit. Bel., p. 118, pl. xxxi., xxxii., f. 76-79, non 80, 81; G. Y., pl. xxvi., fl. B. attenuatus, Mant., Phil. Trans 1848; B. puzosianus, d'Orh., T. J., p. 117, pl. xvi., f. 1-8.	-	H 1 4 Le 1 P 1 Jm			H		5		La		Q. J. G. S., xxi., p. 224. See also note to Bel. troslayanus. The Kim. Clay specimens are described by Pavlow under B. puzosianus.
Owenii, var. tornatilis, Phil., Brit. Bel., p. 121, pl. xxxii., f. 80; G. Y., pl. xxvi., f. 2.		S 1 K 6 Le 1 S 1 P		S 5							May be distinct species (Phil.)
puzosianus, d'Orb., v. B. Owenii. semihastatus, Blainv., v. B. hastatus. semisulcatus, Münst., Bemerk. Kennt. der Bel., p. 5, t. 1, f. 1-8. troslayanus, d'Orb., Prod. II., p. 43; Dollf., Kim. Cap de la Héve, p. 37-38, pl. iii., f. 1. sp.					F		E		J		Single specimen, North Grim ston. The synonomy of this specie and of B. nitidus has beer revised by Pavlow, loc. cit pp. 63, 68. It is doubtful i either of these species occu in the Specton Clay.
Nantilus: aganiticus, Schloth., Petref., 1, p. 83; Quenst., Jura, t. 72, f. 10. dentatus, Rein., v. Am. crenstus. discus, Rein., v. Am. ocnlatus. hecticus, Rein., v. Am. hecticus. hexagonus, Sow., M. C., t. 529 f. 2; d'Orb., T. J., p. 161, pl. 35	. Ci	-1^{-3}	.	F	. .	H.					Single specimen, North Grim
Jason, Rein., \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	•		I	S	3						

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
PISCES. Asteracanthus: ornatissimus?, Ag., v. Tab. II. Cestracion: sp. Eurypoma: Egertoni, Egerton, (Macropoma) Mem. Geol. Survey, dec. ix., pl. x.; (Eurypoma) Huxley, loc. cit., dec. xii., p. 32; (Palæoniscus?) Leck., Geologist, 1859.	M			H? Mm		M101			Le		Very rare, Spine, Hud. Coll. A. S. Woodward, Geol. Mag, 1889, p. 362. Fin spine. The specimen described by Egerton as M. Egerton is much the Gault of Specton is doubtless the same as Leckenby's Palæoniscus, which is
p. 9. Gyrodus: Cuvieri , Ag., 2, pt. 2, p. 230, t. 69a, f. 21-23; <i>G. minor</i> , Ag. 2, pt. 2, p. 234, t. 69a, f. 14: Phil., G. Y., pl. 2, f. 55. punctatus , Ag., 2, pt. 2, p. 281, t. 60a, f. 24.					? 5				P		from the Kim. Clay. Stated by Etheridge, in 3rd Ed. of Phil., Geol. Yorksh., 1875, to be from the Neo- comian, but probably from the same beds as Eurypoma Egertoni. Probably Malton Oolite. York Museum.
sp., Phil., G. Y., pl. iv., f. 22. sp. Hybodus:								P H.?			Slingsby. Palate in Leck. Coll. ? Malton.
grossiconus, Ag., 3, p. 184, t. 23. f. 25-41. obtusus, Ag., 3, p. 186, t. 23, f. 43, 44; Platnauer, Rep. York. Phil. Soc., 1888, p. 35, pl. i., f. 1-16; A. S. Woodward, Cat. Foss. Fish. B.M., p. 272, pl. xi., f. 8-13.		,		H 5 Pl 5 Mm	Pl	H ? Pl H 5 Mm Ym		Mm Ym			Teeth and spine, York Museum (Platnauer).
sp., Phil., G. Y., pl. ii., f. 51-53. Lepidotus: sp. Mesodon;				P	!				PP		Given by Phillips from the Neocomian. Near Howsham [? Leavening].
umbonatus, Ag., (<i>Pycnodus</i>) 2, pt. 2, p. 194. t. 728, f. 1, 4.					?			н			Bean Coll., British Museum.
Notidanus: serratus, Fraas, Wurt. Jahresh., 1855, vol. ix., p. 98; Quenst., Jura, p. 784, pl. 96, f. 44; A. S. Wood- ward, Geol. Mag., 1886, p. 212, pl. vi., f. 7; A. S. Woodward, Cat. Foss. Fish. B.M., p. 159,			Wo								Tooth in Bean Coll., British Museum, No. 35,667.
Orthacodus: longidens, Ag. 3, p. 298, t. 37, f. 24-29; Squalus, tooth, Phil., 1829; Squalus Phillipsii, Rouillier, Bull. Soc. Imp. Nat. Moscon, 1846, pt. II., pl. B. f. 6 (name given, loc. cit., 1847, pt. 1, p. 372); Hybodus, sp. Phil., 1875.			Sm P Ym								The specimen in Scarborough Museum appears to be that figured by Phillips, G. Y., pl. v., f. 22.
sp.			Sm					Mm			Teeth: A. S. Woodward, Geol. Mag., 3, vol. vi., 1889, p. 362.

Species.	Fass down,	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr and Upper Lst	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Palæoniscus: Egertoni, v. Eurypoma. Pycnodus: umbonatus, Ag., v. Mesodon.											
Spheerodus: sp. Squalus: Phllipsii, Rouil, v. Orthacodus longidens,					H ₅	,					
Strophodus: radiato-punctatus, Ag., 3, p. 128, t. 18, f. 27.		Ąg.					,		;		? Asteracanthus. Tooth. Type in Scarborough Museum.
REPTILIA. DAKOSAURUS: SP.				н	н	ĦР					Teeth, Probably Pliosaurus grossouvrei (P. teretidens,
Ichthyosaurus : spp.								P	J B		Owen).
Megalosaurus: Bucklandi, Meyer. Palæol., p. 110; Buckl Geol. Tr., 2, ser. 1, p. 390, t. 40-44; Cuv., Oss. Foss., 5, pt. 2, p. 343; Owen, Odont., p. 269; Phil., Thames Valley, p. 196, woodcuts 56-69, p. 319, woodcut 123, p. 390.								H. 5 P 5	L		(Tooth) ? Slingsby. York Museum. Malton.
METRIORHYNCHUS?								_			
^{SP.} Plesiosaurus : spp.			K					Bm Ym		J	British Museum. Nos. 36356- 39. The crowns of feur teeth from Malton; B. M. Cat. Foss. Rept., pt. i., p. 99.
Pliosaurus: grossouvrei, Sauvage (<i>Liopleu-rodon</i>) Bull. Soc. Géol. Fr., 3, t. 1, 1673, p. 379, pl. 7, f. 2; A. S. Woodward, Geol. Mag., 1885, p. 504; Cat. Foss. Vert., p. 274; Lydekker Cat. Foss. Rept., pt. ii.				H 5	н	H ₅					cf. P. brachydeirus, Owen, See Hud., Proc. Geol. Assoc., v., p. 481.
p. 130; P. teretidens, Owen, MS. sp. sp., Owen, Brit. Assoc. Rep., 1841, p. 64.									P		Probably Ichthyosaurus. Humerus. York Museum.
Teleosaurus : sp.								H			Lower jaw in York Museum,
"Undetermined Coracoid," Phil.		P						5		.	

ADDENDUM.

Since the foregoing tables were in type, the following additions and revisions have been made to the Ammonites and Belemnites from the lower part of the Specton Clay, by A. Pavlow, "Argiles de Specton." Moscow. 1892.

"Argiles de Speeton," Moscow,	'Argiles de Speeton," Moscow, 1892.										
Species.	Pass down,	Kellaways Rock.	Oxford Clay.	Low. Cal. Gr. and Low. Lst.	Mid. Cal. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites: cf. dorsoplanus, Michalski, (Virgatites) Com. Geol. Russ., t. viii., pl. xi., f. 4; (Olcostephanus) Pavlow, Argiles 115, pl. v., f. 4.										Pv	Coprolite bed. Paylow (pl. v., f. 4), in Headley Coll.
fragilis, Trautschold, Bull. Moscow, 1866, pl. iii., f. 3; (Olco- stephanus) Pavlow, loc. cit., p. 117, pl. xiii., f. 3, 4.			1							Pv	Near to Am. subditus, Traut, Pavlow, (pl. xiii., f. 4) in Lamplugh Coll.
gravesiformis, Pavlow, (Olco- stephanus) loc. cit., p. 124, pl. xiii., f. 7, 8; Am. gravesianus, Struckmann, Deutsch. Geol. Ges. 1837, pl. iv., f. 5 (non d'Orb.).										Pv?	Type in Yo Museum, Am. cavati us, Beau, MS. Pavlow, loc. cit., p. 184.
lacertosus, Dum. & Fout., Am. de Crussol, 1876, p. 100, pl. xv., f. 1; Loriol, Baden, 1877, p. 50, pl. vi., f. 1; (Perisphintes) Pavlow, loc. cit., p. 110, woodcut.									Pv		
Tamplughi, Pavlow, (Olco- stephanus) loc. cit., p. 127, pl. xiv. f. 1; pl. xv., f.1; Am. port- landicus, Struckmaun, loc. cit. pl. v., f. 8; pl. vi., f. 9 (nou d'Orb.).										Pv	Types in Scarborough Museum and Lamplugh Coll.
cf. miatschkoviensis, Michal. (Perisphinotes) loc. cit., p. 159, pl. ix., f. 9, 10; Pavlow, (Oleo- stephanus) loc. cit., p. 114, pl. iv., f. 6.									Pv		
cf. Panderi, d'Orb., Geol. Russ., p. 430, pl. xxxiii., f. 1-5; Michal. (<i>Virgatites</i>) loc. etc., pl. xii., f. 1; Pavlow, (<i>Olcostephanus</i>) loc. etc. p. 115, pl. v. f. 5.	,									Pv	Coprolite bed. Pavlow,(pl. v., f. 5), in Headley Coll.
pseudomutabilis, Loriol, Boul. 1874, p. 28; (Hoptites) Pavlow, loc. cite, p. 98, pl. iv., f. 7; Am. mutabilis, d'Orb., T. J. p. 553, pl. 214, f. 1-4; Am. calisto, (d'Orb.) Damon, Geol. Weymouth, pl. xiii., f. 2.				•					Pv		Pavlow (pl. iv., f. 7), in York Museum.
cy. scythicus, Michal., (Virga- tites), loc. cit. pl. v., f. 6, 7; pl. vii., f. 1-7; pl. viii., f. 1; pl. xiii., f. 10; (Olcostephanus) Pavlow, loc. cit., p. 115, pl. v., f. 7.	1			I						Pv	Coprolite bed. Pavlow (pl. v., f. 7), in Headley Coll.
subundorae, Pavlow, (Hov- lites) loc. cit., p. 99, pl. iv., f. 8; Am. stephanoides, (Oppel) Damou, Geol. Weymouth, pl. xiii. f. 4.					*				Pv		Type (Am. evalidus) in Bean Coll. Bm.

Species.	Pass down.	Kellaways Rock.	Oxford Clay.	Low. Calc. Gr. and Low. Lst.	Mid. Calc. Gr. and Upper Lst.	Coral Rag.	U.C.G. and Cement Stone.	Coralline Oolite.	Kimeridge Clay.	Portlandian Beds.	Remarks.
Ammonites—cont. cf. Tchernyschovi, Michal., (Virgatiles) loc. cit., pl. viii., f. 2, 3; (Olcostephanus) Pavlow, loc. cit., p. 115, pl. v., f. 6.										Pv	Coprolite bed. Pavlow (pl. v., f. 6), in Headley Coll.
Belemnites: cf. absolutus, Fisch., Oryctogr., p. 173, pl. xlix., f. 2 (non d'Orb.); Pavlow, loc. cit., p. 48, pl. v., f. 3.										Pv	Coprolite bed.
explanatus , Phil., Brit. Bel., p. 128, pl. xxxvi., f. 94-96; Damon, Geol. Weymouth, pl. xiii., f. 6; Pavlow, loc. cit., p. 57, pl. vi., f. 2; pl. viii., f. 8, 9.					,					Pv	
explanatoides, Pavlow, loc. eit., p. 59, pl. vi., f. 1.										Pv	
lateralls, Phil., G. Y., pl. xxv., f. 8; Pavlow, loc. cit., p. 51, pl. vi., f. 3, 4; Bel. corpulentus, Nik. Com. Geol. Russ., vol. ii., p. 146, pl. viii., f. 34, 35.										Pv	
magnificus, d'Orb., Geol. Russ., p. 425, pl. xxxi., f. 1-5; Pavlow, loc. cit., p. 44, pl. v., f. 1, 2; <i>Bel. nitidus</i> , Dollf., Kim. Cap de la Heve, pl. iii., f. 5, 6, 7 (non 2, 3, 4).									Pv		
obeliscoides, Pavlow, loc. cit p. 42, pl. iv., f. 2.		_							Pv		
porrectus, Phil., Brit. Bel., pl. xxxii., f. 81; Pavlow, loc. cit., p. 43, pl. iv., f. 3, 4; Bel. strigosus, Phil., Brit. Bel., p. 121; Bel Juddii, Phil., G. Y., pl. xxv., f. 9.									Pv		
puzosianus, d'Orh., T. J., p. 117, pl. xvi., f. 1-6; Pavlow, loc. cit., p. 38, pl. iv., f. 1.									Pv		Pavlow (pl. iv., f. 1), in Lamplugh Coll.
russiensis. d'Orh., Geol. Russ., p. 422, pl. xxix., f. 10-16; Nikitin, Com. Geol. Russ., vol. ii., pl. vii., f. 32, 83; Pavlow, loc. cit., p. 56, pl. vi., f. 7, 8, 9.					-		t.			Pv	
subquadratus, Röm! Verst. Ool., p. 166, pl. xvi., f. 6; Quenst., Ceph., pl. xxx., f. 26, 27; Pavlow, loc. cit., p. 54, pl. vi., f. 5, 6; pl. vii., f. 1; Bel. Souchti, d'Orb., T. J., p. 183, pl. xxii., f. 4-8 (non de Lor.).	-									Pv	•

The following species of Ammonites are found in "the compound nodular hand" at the top of the Portlandian Beds, but as they should probably be referred to the Cretaceous rather than to the Jurassic Rocks they have been omitted from the above list:—Am. regalis, Bean; Am. amblygonius, Neum. and Uhl.; Am. hystrix, Phil.; Am. Roubaudi, d'Orb.; Am. bidichotomus, Leym; Am. ramulicosta, Pavlow; Am. Beani, Pavlow; Am. rotula, Sow.; Am. Keyserlingi, Neum. and Uhl., and others the horizon of which is doubtful.